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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

JANUARY, 1954

VOLUME 51, NUMBER 1

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Plan Now to Attend 1954 Annual Session M.S.M.A., St. Louis, April 4, 5, 6, 7

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Curiosa et Trivia

William B. McCunniff, M.D.

Sir William Osler's solution to the "no time to read" problem: regardless of the hour, he read 15 minutes every day just before retiring.

Figures gathered in Baltimore indicate that divorce and separation rates increase markedly when a wife has a colostomy performed; there is no significant change in rates when the same operation is performed on the husband.

Newlywed students at the Kansas University School of Pharmacy, Walter Haskins and Margaret Follett, have class averages (of a possible 3.0) of 2.96 and 2.90.

City dwellers in the 20 to 29 age group show an incidence of tuberculosis of one case per 1000; the incidence in medical students is 3.3 per 1000.

Taleopathologists recognize as poliomyelitis a foot defect in Siptah of the Nineteenth Egyptian Dynasty of 1225 B.C.

Aging is a relative process: Arturo Toscanini is 82 years old; Verdi wrote his opera "Falstaff" when he was 80; Commodore Vanderbilt in the thirteen years following his seventieth birthday, added one hundred million dollars to his fortune; Titian at the age of 98 painted "The Battle of Lepanto"; Bernard Baruch represented the U. S. on the Atomic Energy Commission at 76, is now 83; Root revamped the setup of the World Court at the age of 84.

Although experiments (1747-1753) indicated the cause of scurvy with a fair degree of certainty, over a hundred years later in the Civil War there were over 30,000 cases and 383 deaths attributed directly to this disease.

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Guest Editorial

Homecoming

A. N. Arneson, M.D., *President, St. Louis Medical Society*

It is not unreasonable to consider the recent St. Louis A.M.A. clinical meeting in the light of a homecoming. This does not imply a return to the founding point, although St. Louis was honored with the second Interim Session in 1948. In considering the educational product collectively presented, the term "homecoming," in a broad sense, can be applied to any scientific assembly of doctors of medicine. Furthermore, it appears equally appropriate to cast the A.M.A. in the role of a foster mother to the profession, and in its functions of medical education and health practices. Finally, St. Louis has the distinction of being the locale where many major decisions have been made. It was an honor for the St. Louis Medical Society to serve as host at the recent meeting—we hope the Association will meet again in our city.

A. N. Arneson, M.D.

Through the years there is change. The A.M.A. has changed; so have its constituent state and county organizations. Perhaps the endeavor most uniformly assumed at all levels is in the field of public education. At the 1953 Medical Public Relations Institute, held in Chicago, Dr. W. W. Bauer, Director of Health Education for the A.M.A., stressed the activities of several agencies which have lessened the importance of local societies in the field of medical education for doctors of medicine. He also pointed out the significance of dignified service types of programs in public education. Whatever form these practices take, we must not forget our scientific and educational background, and we must not overlook integration of the individual in daily routine.

Elsewhere in this issue of Missouri Medicine is an account of the stimulating work of Dr. Howard Dittrick, of Cleveland, in the development of the Howard Dittrick Museum of Science. A brief comment on the history and aims of the St. Louis Academy of Science is also presented by Dr. Harold Bulger. Is there a more appropriate atmosphere for work and participation by doctors of medicine? Is there a more lasting and fertile field for public education?

The relationship of the A.M.A. meeting and a Museum of Science is not intimate; neither are they separated by a chasm of difference. Both are significant for the State of Missouri; if the opportunity to be host to either falls to St. Louis, then both deserve support and assistance from all doctors in the spirit of Homecoming for Missouri Medicine.

Scientific Exhibits

Request for space for Scientific Exhibits for the 1954 Annual Session, April 4, 5, 6 and 7, should be sent to the Committee on Scientific Exhibits, Missouri State Medical Association, 634 N. Grand Ave., St. Louis 3, Mo., prior to February 1, 1954.

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Missouri Academy of General Practice

William J. Shaw, M.D.

In a dignified atmosphere of almost perfect equanimity and without recourse to any action encouraging unwanted publicity or pictures in the lay press, the Missouri Academy of General Practice conducted its Fifth Annual Assembly at Jefferson City, Oct. 28-29.

The excellence of the scientific program was attested by the enthusiastic audience at every session. A total of 213 registrants from all parts of Missouri took the opportunity to refresh themselves on newer concepts of medicine, to greet old friends and to obtain formal credits for continued membership in the American Academy of General Practice. Dr. Pliney Blodgett, Chicago, Illinois, Academy president, and Dr. W. H. Walton, Belleville, Illinois, immediate past president of the Illinois chapter, attended with their wives. Dr. Blodgett addressed the assembly Thursday.

Dr. William F. Wagenbach, St. Louis, was installed president of the Missouri Academy by Dr. Kenneth Glover, Mt. Vernon, retiring president. New officers chosen were Doctors Joe Getelson, Kansas City, president-elect; C. G. Stauffacher, Sedalia, vice president; P. V. Siegel, Smithton, secretary-treasurer; John Pearl, St. Clair, E. C. Bohrer, West Plains, and R. R. Becker, Kansas City, Board members.

William A. Sodeman, M.D., Professor of Medicine at Misouri University Medical School, spoke at the first luncheon meeting on "Evaluation of Chest Pain." The second day luncheon group referred questions to a panel composed of the Assembly speakers: Doctors Roscoe L. Pullen, Sodeman, Paul Williamson, Charles Brasher, Harry B. Stauffer, and Carl A. Moyer.

The annual banquet was attended by 144 registrants, who heard a timely and informative illustrated talk by Dr. Pullen on "Aims and Goals of the Medical School at the University of Missouri," and appreciated the opportunity to ask the speakers questions relative to plans for the new school and its relationship to the state's general practitioners.

The scientific program presented and the spirit which prevailed at this fifth annual meeting convinced all present that the Missouri Academy of General Practice had burst out of its swaddling clothes and had reached a state of maturity compatible with the conservative adult garments it has now assumed.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Once in a while something happens that sorta makes you wonder if most people ain't completely lost their sense of values or at least the ability to use good judgement. The other night I went to see a kid that had been sick for several days. She had the rottenest teeth I had ever seen barrin' none. The Pa said he reckoned he would take her to the dentist one of these first days. What really shook me was the fact that he was giving up his house and moving his wife and four kids back in a two room apartment because he couldn't keep up the payments on house, '53 car and 27″ TV set and he just couldn't give up the latter. I reckon the guy what sold him the car and TV as well as the Credit Agency know a bargain when they see it.

Next day or so I overheard one of my kids asking the Missus what I had done that I oughta be in jail. I right away tried to think and since I had slowed down driving and hadn't done any abortions for a spell I had been feeling right pious. Then it developed the kid had been reading *Colliers*. Didn't take any thinkin' to realize that some of our Union have really lost their sense of values and good judgement—that is if they ever had any in the first place.

Now fee splittin' ought to be easy stopped. Seems to be it's sorta like having a baby and in my book that always requires a detail or two and I ain't heard tell of many males gettin' raped. When I first settled here I was propositioned on several occasions. Only once was it by a someone else just startin' out. Rest of the time it was well established men. I found out by now that there is a class of untouchables in our profession whose code must be do as I say, not do as I do. Of course they don't split. But they have a well trained set of office help, nurses they know in hospitals and even druggists that keep the patients coming. So if the man what does the surgery didn't split there wouldn't be any such thing.

Think maybe some of our union officials had better revise their sense of values and take stock of the results of their judgment or change their occupation. Grandpap wouldn't have been a bit backward in tellin' them to go get a tin bill and pick their manure with the rest of the chickens.

Your country nephew,
Pete

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F	F is for Facts . . . we tell them.	**R**	R is for Requirements . . . we study yours.
G	G is for Guarantee . . . have you heard about ours?	**S**	S is for Satisfied . . . you will be.
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Our President, E. Claude Bohrer, M.D., was the subject of a special article in MISSOURI MEDICINE at the time of his induction. In an interview with him he stated his library was his chief hobby, with music and photography as close competitors.

So intense is this primary avocation of Dr. Bohrer's that one large room of "the old home" has been allocated for the collection of his interesting volumes. More than 2,000 volumes are catalogued and filed (plus another equal number of books "which I haven't gotten around to filing"). The titles of these tomes run the gamut of history, psychology, chemistry, physics, paleontology, sociology, religion, music and other topics including a liberal portion of "Who-dunits."

E. Claude Bohrer, M.D.

Dr. Bohrer displays a secondary penchant for volumes which deal with the Ozarks and the history of Missouri, as well as a complete section on the history of the Revolutionary War and the Civil War. A liberal section is devoted to the histories of foreign countries: Great Britian, France, Canada, China, India, Russia, Turkey and Australia. His biographical section includes Dickens, Newton, Huxley, Pasteur, Napoleon, Cromwell, Queen Elizabeth, Marie Antoinette, Savanarola and Machiavelli.

Another large section is devoted to the history of medicine. Texts on mathematics are well represented, as are his files on the American Indian, the Spanish Conquistador and pirates.

Two shelves particularly hold Dr. Bohrer's love. One, his antique volumes include Virgil's "Works," 1755; Boerhaave's "Medical Aphorisms," 1742; Wadds' "Comments on Corpulency," 1829; Laennec's "The Chest," 1832. The other shelf, of which he is especially proud, contains volumes concerning music and musicians. In addition to these biographical and analytical books, he has full symphony and concerto scores from many of the masters.

As our readers will recall, Dr. Bohrer has been interested in music since a child, both in vocal activities, as a member of the University Glee Club, as a member of a male quartet in high school, college, and in church activities, also as a pianist. He assembled his own high fidelity equipment for playing his extensive record collection.

At present, Claude is "majoring" in photography as a hobby. In this field he is doing color work exclusively, with some stereo compositions.

Obviously, our "prexy" has an abundant background of hobbies from which to choose as a relief from the tedium of an active practice in West Plains.

(We will appreciate information concerning other members with unusual hobbies. V. T. W.)

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- With the aid of allies in public health, sanitary engineering and others, medical science has progressed farther in controlling physical disease and the understanding of mental health in the past 50 years than it had advanced in the entire period from the time of Hippocrates to the turn of the 20th century. Pollack, R. W.: Northwest Med. **52** (April) 1953.

- Young children below the age of 5 years stand rib resection for empyema badly; intercostal drainage offers a better prospect. Bailey, H.: Emergency Surgery, 4th Ed., Williams & Wilkins Co., Baltimore, 1950.

- Paraminobenzoic acid is a member of the B-complex group of vitamins and is a known constituent of many food substances. It is of benefit in the treatment of dermatomyositis, rheumatoid arthritis, and scleroderma. Zarafonetis, C. J. D.: Texas J. Med. **49** (September) 1953.

- The incidence of tracheitis following endotracheal anesthesia (by intubation) may be reduced by avoiding mechanical force, chemical irritation and contamination during intubation and by treatment with antibiotics, oxygen and use of a humidifier. Smith, R. M.: Current Researches in Anesthesia & Analgesia **32** (March-April) 1953.

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It is a real inspiration to meet the members of the county auxiliaries. Their consistent work makes possible the fine record of our state in furnishing nursing and medical student scholarships, radio and TV transcriptions to local stations, mental health public relations days, "Know Your Own Community" projects, the placing of *Today's Health* in schools, offices and libararies, serving on civil defense and civic committees, serving on individual hospital auxiliaries and planning the entertainment for local and state medical meetings. There are a few of the time consuming projects which form the backbone of our Auxiliary work.

May I take this time to wish each one of you a New Year full of health and happiness and to make Tennyson's words our New Year's resolution:

"Ring out old shapes of foul disease
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace,
Ring in the valiant man and free
The larger heart, the kindlier hand;
Ring out the darkness of the land
Ring in the Christ to be."

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Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

On asking one of my patients if she had noticed anything unusual about her menstrual periods in the last year, she replied, after some thought. "No, except that in February my period lasted only two days instead of the ordinary six, but I didn't think that was unusual because February is such a short month."

One of the detail men was just in proclaiming the effectiveness of a new Quint-sulfas. I'm waiting until someone combines all the mycin's, cillins and sulfas in one tablet, then you can kill all the "bugs" with one tablet as well as the patient.

The onset of the "cold season" reminds me of O'Henry's squib "that life is made of sobs, sniffles and smiles with sniffles predominating."

Dr. Morris says that modesty has ruined more kidneys than bad liquor.

The constant flood of new pharmaceuticals makes me wish for the "good old days." There used to be an old Doc hereabouts who carried his pills in his pocket and doled them out along with a few shreds of long green—which was good for worms anyway.

A patient just called and asked if I could give her violent ray treatments.

To show how the trend of these times affect medicine—while taking a history on a patient and asking about previous surgery—she stated she had had an atomic pregnancy in her left tube two years ago.

Uncle Ed, one of the local street corner philosophers, said the more he saw of some people the more he thought birth control should be retroactive.

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[1] Heller, E. M.: The Treatment of Essential Hypertension. Canad. Med. Assn. Jour., 61:293, Sept., 1949.

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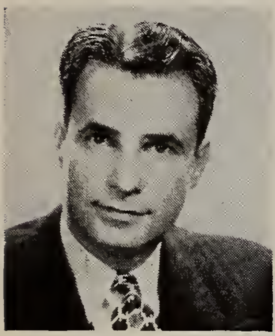
Missouri Medicine in Review

LEO H. POLLOCK, M.D.

JANUARY 1914

Dr. C. E. Michel, of St. Louis, Medical College of the State of South Carolina graduate, 1857, died at 80; a distinguished oculist, a teacher in Missouri Medical College. He was the first in the world to use electrolysis; the first to use present accepted method for removal of pterygium, and among the first to remove the fear of cataract operation (by not keeping the patient in a darkened room for months). While not a member of organized medical society, his life and acts supported all the ideals for which it stands.



Typhoid fever has been epidemic in Sedalia for several weeks; over 150 cases reported. Sedalia has no sewage disposal system other than allowing it to drain on open land just outside the city where cows are pastured. Perhaps a sewer system will be built sometime, but many valuable lives will be sacrificed before people wake up.

The State Journal has an article on phenosulphonephthalein, introduced in 1910, for renal function test. This was developed after Hahn noticed the absence of a violet-like odor in gouty patients after ingesting turpentine, and Rayer noticed the absence of the peculiar odor in urine of nephritis after eating asparagus.

JANUARY 1929

The State Journal continues to receive letters praising the pathology exhibit at last year's Columbia Session of the Association. This was prepared by M. Pinson Neal, M.D., Professor of Pathology, Missouri School of Medicine, and his associate, Dudley A. Robnett, M.D., Assistant Professor.

Washington University Medical School has developed rapidly. It started in 1891, when the University took over the faculty and inherited the splendid traditions of fifty year old St. Louis Medical College. Eight years later it amalgamated with long established Missouri Medical College. While always a leader, its greatest accomplishments have been in less than eighteen years. Barnes Hospital was fused with the University which moved its school and dispensary from the old downtown location to the present site. The St. Louis Children's Hospital soon joined, the Isolation Hospital was built by the University, and St. Louis Maternity Hospital has become associated.

JANUARY 1944

Dr. William M. West, Monett, has deeded his Monett hospital to the Vincentian Sisters of Charity, of Perrysville, Pennsylvania, who will operate it as a general public hospital.

The Kansas City Southwest Clinical Society has elected: President, Dr. Max Goldman; Vice president, Dr. J. A. Billingsley; Secretary, Dr. W. M. Korth; Treasurer, Dr. H. S. Valentine; Director of Clinics, Dr. Vincent T. Williams; Editor, Dr. E. H. Skinner; Executive Committee, Drs. J. V. Bell, L. Lafe Bresette, Carl F. Ferris, W. M. Ketcham, Ira H. Lockwood, J. Milton Singleton, and J. E. Stowers.

Letters to Missouri Medicine

In Re Museum in St. Louis

To the Editor:

The history of the Natural History Museum Movement in St. Louis is one of calamity followed by indifference. William Clark, in the years following the famous expedition, developed a unique museum of objects brought to him by his Indian friends from the west. After his death it was sold and shipped to Germany before St. Louisans were aware. A Koch Museum, later Wyman Museum, disappeared. Two early medical schools had outstanding museums. It seems that all of this material was later assembled by the Academy of Science, founded in 1856. This appears to have been one of the significant museums of the country at the time, containing many type specimens. It would, no doubt, have been the nucleus for a great institution in the City of St. Louis. However, a fire in 1869 completely destroyed this important collection. Later attempts to found a museum were not successful until the present museum, 4642 Lindell Boulevard, was established in 1943. There is a growing appreciation by the community of the scientific and educational work of the present museum. It is, however, only the beginning of the extensive science center planned for the future. At present, there has been some development of exhibits concerning the natural history of man, but only nedlous plans for a department like the great Cleveland Museum.

HAROLD BULGER, M.D.

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President's Comments

Compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act again was adversely acted upon by the House of Delegates of the American Medical Association meeting recently in St. Louis.

Passage of the Jenkins-Keogh bills was advocated as the alternative, these described as providing for "the development of a voluntary pension program which is equitable, free from compulsion and satisfies the retirement needs of physicians." The reference committee report adopted by the House said: "The purpose of these bills is to eliminate the discrimination and inequities which exist under present tax laws by extending the tax deferment privilege to the country's ten million self employed and also to millions of employees who are not covered by pension plans. The purpose of the resolution is to reaffirm our support of the voluntary pension program provided in the Jenkins-Keogh bills and to reaffirm our strong opposition to the extension of compulsory coverage of physicians and other self employed persons under Title II of the Social Security Act."

The leadership of the American Medical Association can help but the individual physician must do his part in bringing about these legislative matters which are to the interest of the profession.

E. Claude Bohrer, M.D.

Progress Notes of Prepayment Plans

(St. Louis Blue Cross)

While membership in the St. Louis Blue Shield Plan (Missouri Medical Service) climbed rapidly during the last five fiscal years, utilization of the plan's benefits by the members rose at a much higher rate during the same period. Carl F. Vohs, M.D., president of the St. Louis plan, reports that a review of the last five fiscal years shows that, although income from members' dues increased about 127 per cent, payments for medical and surgical benefits jumped 200 per cent.

In the 1948-49 fiscal year, income was $1,283,425, and medical and surgical payments totaled $878,851. During the 1952-53 fiscal period, income was $2,921,852 and benefit payments were $2,711,454. While 68.48 per cent of the income of Missouri Medical Service was paid out in benefits during 1948-49, this utilization figure soared to 92.80 per cent in 1952-53.

Under the sponsorship of the Missouri State Medical Association, the St. Louis Blue Shield Plan increased its membership from 178,001 in 1949 to 355,135 in 1953.

"It is undoubtedly the recommendation of the Blue Shield plan by the doctors of Missouri to their patients that underlies the remarkable increase in membership," Dr. Vohs comments.

"This rapid growth," he says, "has been accompanied, as might have been expected, by many problems. In line with our objective of providing basically needed protection for the public, it was our practice to expand benefits in the early years to the utmost limits that seemed feasible. For example, we included benefits for care of accident cases in doctors' offices; we raised the number of days of allowable medical care in the hospital from 21 to 30 days, and we made numerous increases in other benefits. As we pursued our goal to provide a maximum service to the public, a combination of circumstances finally brought about a utilization increase of dangerous proportions.

"Part of the explanation for the increase in utilization beyond sound limits was our inability to judge in advance exactly what each step of liberalized benefits would mean in terms of costs. Part of the explanation was the natural tendency of subscribers to make greater use of the plan as they grew more familiar with its procedures and benefits. Part of the explanation, we probably ought to recognize, represents a certain understandable inclination of us doctors to give emphasis to the convenience of our patients at, perhaps, some cost to the well-being of the plan.

"Last May 1, a fundamental adjustment was made in the group plan's dues and benefits. I'm happy to report that we are now on an even keel and in a healthy state.

"At this time it is our hope that every doctor, aware that Blue Shield is the medical profession's own plan, will share our concern that utilization be held to realistic levels, so that we may continue to be financially strong for the public's service and protection. Our concern regarding utilization extends, of course, to the companion Blue Cross hospitalization plan."

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Hemoptysis

FREDERICK H. TAYLOR, M.D., AND THOMAS H. BURFORD, M.D., *St. Louis*

EXPECTORATION OF blood is a compelling sign. Few patients on noting blood in the sputum will delay seeing a physician. This is fortunate, for hemoptysis, a term introduced by Galen, signifies serious pulmonary disease in the majority of instances. Fifty years ago hemoptysis was regarded as pathognomonic of tuberculosis. In fact, some observers felt that "hemorrhage causes ptysis."[5] Improved diagnostic technics and the advent of safe thoracic surgery have brought about marked changes in these ideas. In some tuberculosis sanatoria more than 25 per cent of the patients admitted with hemoptysis are found to have nontuberculous pulmonary disease.[1] This clearly indicates that more careful evaluation of these patients should be made by the original examining physician. Unfortunately many physicians still cling to misconceptions concerning the importance of blood-spitting. Even though the patient comes early he is often sidetracked by lack of intelligence on the part of the physician. There may be instances in which telangiectases or varices of the bronchi bleed but we are inclined to believe that this all too common explanation of hemoptysis is the result of over imaginative endoscopy.

The pathogenesis of hemoptysis has been studied by several investigators.[2, 4, 5] The site of bleeding usually depends on the causative disease. For instance, the bleeding produced by tuberculous cavities and lung abscesses often comes from a pulmonary artery. Examination of such an artery often will show an aneurysmal dilatation of the vessel as demonstrated by Rasmussen.[5] Bleeding from such a vessel is usually profuse. Hemoptysis in patients with bronchiectasis and bronchiogenic carcinoma usually arises from a bronchial vessel. Such bleeding is rarely as copious as in cavitary disease. Pulmonary bleeding secondary to mitral stenosis originates in the pulmonary veins or capillaries. In spite of these generalizations, however, the amount of bleeding should not be construed as an index of the type or degree of pathology present. Slight blood streaking of sputum may result from a serious pulmonary lesion and a severe pulmonary hemorrhage may be unexplained after careful diagnostic studies have been made.

The various causes of hemoptysis are too numerous to tabulate completely. Tuberculosis is the most frequent cause of hemoptysis. Bronchiectasis, carcinoma and lung abscess follow in that order. Mitral stenosis, pulmonary infarction and bronchial adenoma are important, though less frequent causes of pulmonary bleeding. In patients more than 45 years old bronchiogenic carcinoma is the most frequent cause of hemoptysis[1] (fig. 1).

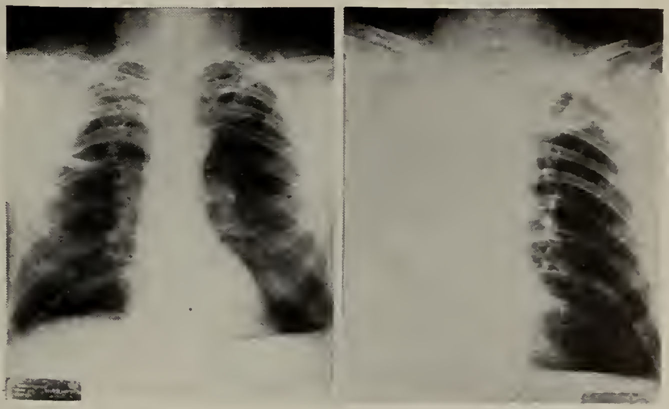

Fig. 1a. Carcinoma of right upper lobe with cavity formation and hemoptysis. 1b. Postoperative right pneumonectomy for carcinoma.

In a series of 497 patients complaining of hemoptysis Abbott[1] found no pulmonary lesion to explain the bleeding in nineteen cases (3.8 per cent). Jackson and Diamond[4] in their series of 436 nontuberculous cases, all of whom had x-ray and bronchoscopic examinations, found no evidence of disease in thirty-four cases (7.8 per cent).

In reviewing the various series of case studies

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in the literature little mention is found of broncholithiasis, (fig. 2) a frequently overlooked lesion which produces hemoptysis by bronchial ulceration. This diagnosis is sometimes difficult to make and no doubt accounts for some of the cases of unexplained bleeding.

Ideally, pulmonary lesions should be diagnosed before hemoptysis has occurred. It has been shown that bleeding is usually a late symptom in tuberculosis, cancer and bronchiectasis.[1, 4] Once a patient develops hemoptysis, a thorough clinical examination is imperative. The mouth, pharynx and sinuses should be excluded as the bleeding focus. Occasionally hematemesis is confused with hemoptysis, but a careful history and examination of the esophagus and stomach will clarify this problem. Most patients are certain of the source of the blood and many can tell whether the blood comes from the right or the left side. The coughing up of stones or fragments of stones is diagnostic, but not always present, in broncholithiasis. Hemoptysis associated with raising of pieces of tissue is pathognomonic of carcinoma. Needless to say, tissue that is coughed up must be examined under the microscope. Purulent sputum leads one to suspect bronchiectasis and lung abscess. A history of rheumatic fever and findings of valvular disease point toward mitral stenosis as the cause of bleeding. Although the patient's history and physical findings are important, the cause of hemoptysis is rarely determined by these alone. All patients with hemoptysis require an x-ray examination of the chest. Chaves[3] in studying ninety-one patients with hemoptysis due to proven pulmonary disease was able to visualize the lesion in all but two cases on the first x-ray examination. The patient's early morning sputum should be examined repeatedly for acid-fast bacilli and, when possible, for tumor cells.

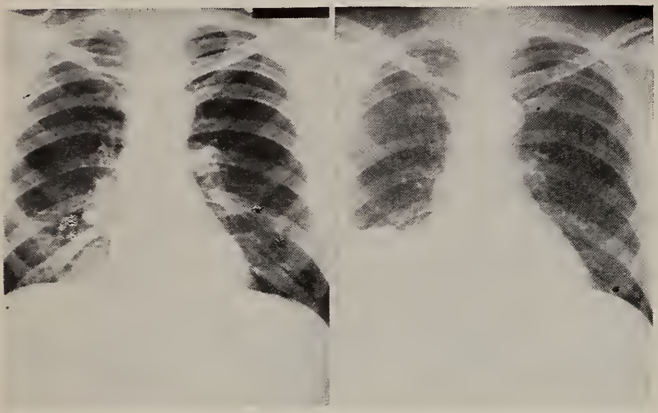

Fig. 2a. Hemoptysis due to broncholithiasis of right lower lobe. 2b. Right lower lobectomy for broncholithiasis. Hemoptysis did not recur after operation.

In most instances patients complaining of hemoptysis should have a bronchoscopic examination unless the bleeding is due to such lesions as pulmonary infarction, mitral stenosis or acute pneumonia. Jackson and Diamond[4] visualized the hemorrhagic focus by bronchoscopic examination in 25 per cent of their series of nontuberculous patients. Bronchoscopy is often useful when done during an episode of slight bleeding, especially when no lesion is visible by x-ray examination for, in this way, it is usually possible to determine which lobe or lung is bleeding. This information is most helpful when surgery is contemplated. If bleeding is profuse, however, bronchoscopy is not only hazardous, but is of little value as it is impossible to be sure of the location of the bleeding. In such instances, blood wells up throughout the tracheobronchial tree making accurate examination impossible. When no pulmonary disease can be found in a patient with a history of hemoptysis it is sometimes valuable to have the patient return for another bronchoscopy during his next episode of hemoptysis. It may be necessary to do this several times but, if the location of the bleeding is determined, it is worthwhile.

Gross lesions of the tracheobronchial tree seen through the bronchoscope are biopsied for pathological examination. Bronchial secretions are collected by irrigating the bronchial tree with saline. These secretions are examined for acid-fast bacilli and tumor cells. Occasionally a broncholith can be seen or felt during bronchoscopy. As these calcified nodes are frequently in close association with the large pulmonary blood vessels, usually no attempt is made to remove them through the bronchoscope. An occasional patient will cough up the broncholith after the examination is completed.

As bronchiectasis is the second most common cause of hemoptysis, bronchography is an important examination in evaluating the patient with pulmonary bleeding (fig. 3). A few patients with bronchiectasis do not have the typical history of copious, purulent sputum. So-called "dry bronchiestasis" will produce bleeding, especially in older patients. Bronchiectasis may be confined to one small lung segment or it may be extensive throughout both lungs. For this reason it is important to fill the bronchi of all segments of both lungs with the radio-opaque medium so that a complete radiographic study is made of the entire tracheobron-

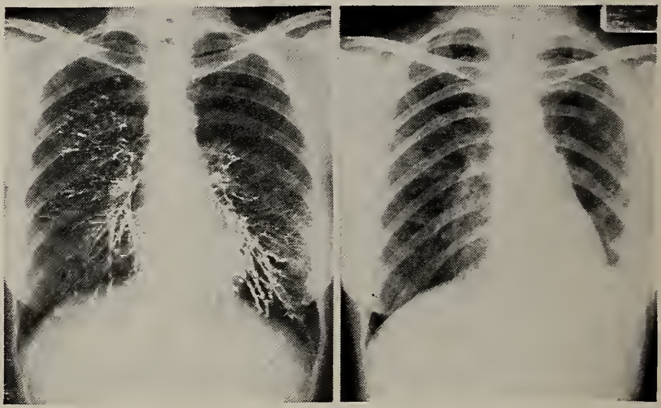

Fig. 3a. Hemoptysis due to bronchiectasis of left lower lobe. 3b. Postoperative left lower lobectomy for bronchiectasis.

chial tree. Bronchographic examination of just the lower lobes or of only one lung is inadequate. Bronchography is sometimes helpful in demonstrating bronchial obstruction and bronchial ulcers. The decision to do bronchograms must often be weighed carefully since the subsequent obscuration of the x-ray films will make them largely useless in following the evolution or regression of a lesion. This point is primarily pertinent when the disease in question is or may be tuberculosis. Few any longer concede any real hazard in tuberculosis from the use of lipiodol.

If, after careful examination of the patient, no pulmonary disease is detected it may be necessary to repeat any or all of the foregoing procedures. At the least, x-rays of the chest should be made at monthly intervals for a sufficient period to be certain that one has not missed something important. A small carcinoma can easily be overlooked. The results from surgical treatment of this disease will be improved only by earlier diagnosis.

The treatment of hemoptysis depends on the underlying disease process. It is most important that an accurate diagnosis be made before definitive therapy is undertaken. Many cases of bronchiogenic carcinoma are overlooked because the patients are first given a therapeutic trial on one or several antibiotics before the correct diagnosis is made. Bronchiectasis, lung abscess and, in recent years, mitral stenosis are all amenable to surgical correction.

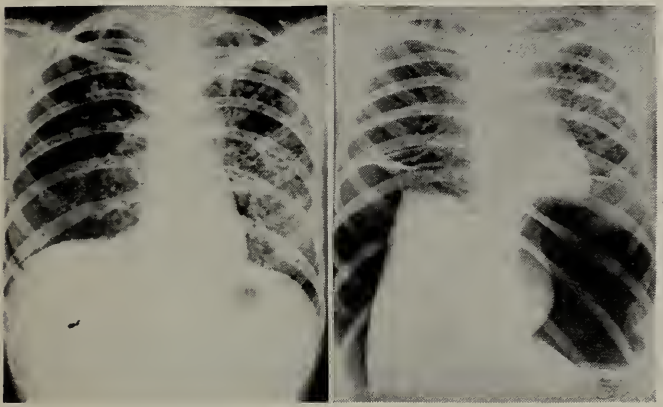

Fig. 4a. Bilateral pulmonary tuberculosis with hemoptysis. 4b. Control of pulmonary bleeding by pneumoperitoneum.

When an acute pulmonary hemorrhage is so profuse that the patient's life is in danger, immediate control of the bleeding takes precedence over the establishment of a definite diagnosis. Most severe pulmonary hemorrhages arise from cavitary disease, primarily tuberculosis. In treating a severely bleeding patient it is well to remember that such patients rarely die of exsanguination. Immediate death is practically always the result of asphyxia. Blood transfusions are therefore not so urgently required as in other forms of blood loss. The bleeding patient must have complete rest. Narcotics should be used freely. Intravenous pituitrin by the slow drip technic appears to have some merit. If it becomes evident that the bleeding is not subsiding by conservative means more radical measures are in order. A useful, but frequently overlooked procedure in the management of severe pulmonary hemorrhage, is phrenic crush. Pneumoperitoneum is helpful in controlling some hemorrhages and may be used to supplement the phrenic crush. Pneumoperitoneum alone is the safest form of collapse therapy when one is not sure which lung is bleeding (fig. 4). Pneumothorax sometimes stops pulmonary bleeding if a good collapse can be obtained (fig. 5). Often, however, the pleural space is partially or completely obliterated by fibrous tissue. If these measures fail to control the bleeding a decision must be made as to whether conservative management should be continued or whether an emergency operation is indicated. Bleeding from an apical cavity is sometimes controlled by a thoracoplasty (fig. 6). If the disease process is localized to one lobe or lung, excision of the lesion may be preferred to collapse therapy (fig. 7). It is of course necessary to be absolutely sure of the location of the bleeding before any major surgery is undertaken.

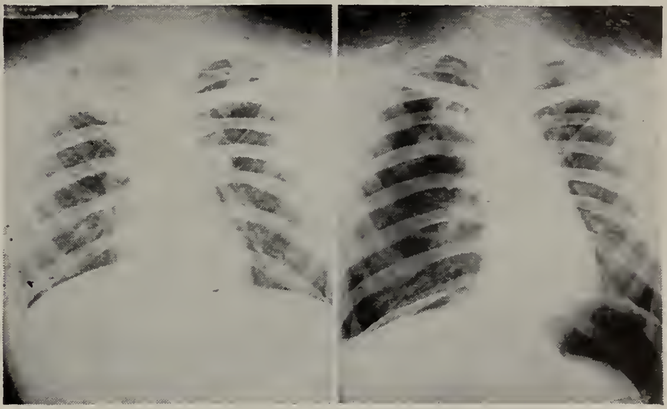

Fig. 5a. Pulmonary tuberculosis with hemorrhage from right upper lobe. 5b. Control of bleeding from right upper lobe by pneumothorax.

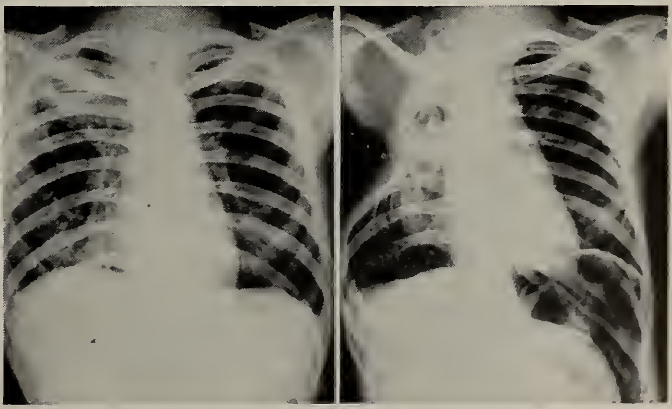

Fig. 6a. Cavitary pulmonary tuberculosis of right upper lobe with hemoptysis. 6b. Control of pulmonary bleeding by right thoracoplasty. (Note: The pneumoperitoneum failed to stop bleeding.)

In summary, hemoptysis is a symptom which indicates serious pulmonary disease. Although tuberculosis and bronchiectasis are the most common causes of hemoptysis, it is important to remember that bronchiogenic carcinoma is the most frequent cause of hemoptysis in patients more than 45 years of age. Patients with hemoptysis should have a thorough examination, including x-ray and sputum studies, usually bronchoscopy, and, if indicated, bronchograms. Improved methods of diagnosis, new chemotherapeutic agents and the advent of safe thoracic surgery all put an increasing responsibility on the examining physician to arrive at a correct diagnosis. The increase in bronchiogenic carcinoma in recent years adds greatly to this responsibility.

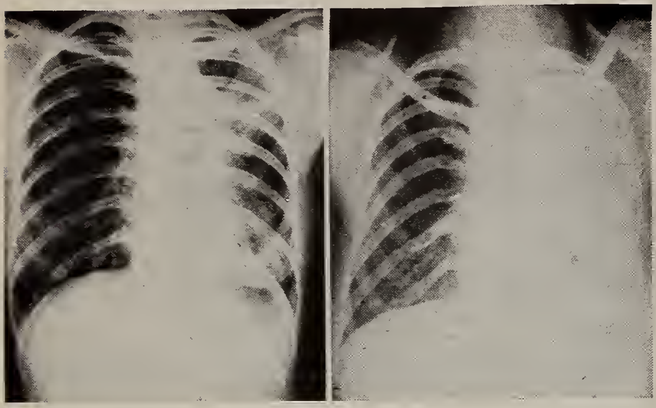
Fig. 7a. Pulmonary tuberculosis with cavitation left upper lobe. Pulmonary hemorrhage. 7b. Postoperative left pneumonectomy for tuberculosis with hemoptysis.

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Dust-Diaper-Detergent-Dishwasher Dermatitis

. . . Being 'just a housewife' can be . . . one of the most dangerous occupations . . . as far as skin disturbances of the hands are concerned . . . about nine per cent of the daily medical endeavor of a practicing dermatologist. . .

The usual patient is a young matron, who must keep house, cook, wash dishes, do the laundry, raise her children, and hold her husband; who can ill afford to sustain the misery of manual disability and whose occupation is inherently one of the most hazardous with which the dermatologist commonly has to deal. . .

The skin of the hands is exposed to the potentiality of diseases provoked by heat, cold, light, moisture, irritant chemicals, sensitizing chemicals, and pathogenic organisms to a degree over and above other skin. It is subject additionally to all the diseases of internal origin that skin is elsewhere, and the hands are especially subject, being special tactile organs, to psychosomatic disturbances. . .—*Archives of Dermatology and Syphilology,* Richard L. Sutton, Jr., M.D., and Samuel Ayres, Jr., M.D.

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Fluids and Electrolytes From a Practical Standpoint

HARRY STATLAND, M.D., *Kansas City*

For the proper understanding of fluid and electrolyte balance one must have a general understanding of the divisions of the various fluid compartments and the difference in their chemical make-up. Fluids may be divided into two major compartments. These are (1) the cellular compartment which comprises about 40 per cent of the body weight and (2) the extracellular compartment which comprises about 20 per cent of the body weight. The extracellular compartment is divided into the plasma and the interstitial fluid. For all practical purposes the interstitial fluid acts more or less as a reservoir for the plasma, since changes in the plasma compartment are immediately reflected in the interstitial fluid. The importance of knowing the relative sizes of these compartments is evident when one studies the chemical make-up of these different fluids. In the extracellular fluid the primary cation is sodium which makes up more than 90 per cent of the total base. This concentration of sodium is rigidly protected under most conditions so that, if the sodium concentration drops, there is a tendency for fluid to be lost in order to maintain the normal plasma concentration. On the contrary, if the concentration of sodium goes up, fluid will be retained in order to maintain this normal concentration.

The concentration of the acid radicals, chloride and carbonate, will vary as the sodium changes and therefore these are of relatively little importance to the mainenance of fluid volume, but they are more concerned with change in reaction (pH). The ultimate importance of sodium then is its preeminent position in the maintenance of blood volume, and any appreciable loss in sodium will cause a diminution of blood volume, and an increase will increase the volume. In comparing this with the make-up of the cellular compartment, one sees the completely different chemical structure. The major cation in the cell is potassium and one finds here only a small amount of sodium, which, however, plays an important part in the regulation of acid-base balance. Potassium is present in the cell as free electrolyte, combined with protein, and it also enters into the utilization of glucose in energy metabolism. The primary anion in the cell is phosphate and there is little chloride present. It should be clear then that if an individual were to lose about two liters of body fluid, evenly distributed between the extracellular and cellular fluid, the replacement of this loss by two liters of normal saline would hardly correct the cellular deficiency and too much sodium would have been given instead.

The major imbalances which may occur in fluid and electrolytes may be grouped under (1) changes in volume, (2) changes in concentration of electrolytes and (3) changes in relationship of electrolytes to each other, which affects acid-base balance.

These may be exemplified first by the water depletion syndrome. This is brought on by inadequate fluid intake in the presence of excessive loss, such as in fever or hot weather, or in chronic debilitating diseases, and in elderly people who cannot care for themselves. It is evident that with the fluid loss from each compartment, a proportionate amount of electrolytes contained in the fluid will also be lost. Loss of a liter of extracellular fluid will carry with it almost as full a concentration of sodium as is contained in a liter of plasma. Loss of a liter of cellular fluid will carry with it the amount of potassium contained in that liter of cell fluid. The clinical picture is marked by extreme thirst because of the increased concentration of the electrolytes in the extracellular fluid, since a larger amount of water has been lost than electrolytes. Restlessness, elevation of temperature and tachycardia are early symptoms and later the patient becomes delirious and maniacal.

The second major imbalance is that of salt depletion. This occurs in individuals who are losing salt, such as in excessive perspiration, diuresis or intestinal drainage with inadequate salt replacement. Here the primary fault is one of marked reduction in volume of the extracellular compartments in which the sodium is at a lower concentration than normal. The cellular fluid, however, may be changed little in volume and, as a matter of fact, there may actually be an increase in its quantity. The clinical picture here is primarily one due to the marked loss in volume of the blood plasma, and the symptoms of medical shock with dizziness, headaches, fainting and marked drop in blood pressure being the primary complaints. Anorexia and nausea are prominent symptoms and, in acute losses, muscle cramps are prominent.

The third major abnormality is that of acid-base imbalance occurring when there is a disproportionate loss of anions as compared to cations. It is also brought on if there is a retention of abnormal acid radicals such as ketone bodies in diabetes, or organic acids, phosphates or sulphates, as in uremia.

If the intake equals the output of water and

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electrolytes, imbalances are not likely to occur, so that it is important to spend a moment examining the normal intake and output. The normal water intake is about 2,500 cc. daily, and the urinary loss will vary depending upon the intake and loss by other means. However, there is a daily obligatory loss of about 500 cc. due to invisible perspiration, and about 500 cc. in the moisture of respiration. This 1,000 cc. loss will occur regardless of intake and regardless of urinary output, and it is in neglect of this daily loss that physicians are apt to get into trouble with their seriously ill patients. It is also evident that under conditions of excessive perspiration the fluid loss from this source may be excessive, amounting to as much as 5 to 10 liters daily. If one compares the normal sodium intake, which varies between 3 and 10 grams of sodium chloride, with the output in the urine, one sees that there is a marked tendency to conservation of sodium when the intake is low. This is extremely important because, if sodium were permitted to be excreted in the absence of adequate intake, there would be a marked depletion in blood volume, which would be catastrophic to the individual. The body, then, has the ability to retain sodium in the absence of adequate intake. In examining the sodium content of the various intestinal secretions one finds that there is an appreciable amount of sodium present so that under conditions of excessive vomiting, diarrhea or with intestinal intubation or fistula, large amounts of sodium may be lost. The situation is somewhat different with potassium however. The normal daily intake of this electrolyte may vary between 3 and 9 grams of potassium chloride daily, but the output rarely drops below 3 grams regardless of intake. There is not, therefore, the same tendency to conserve potassium as there is the sodium. Even if the intake drops to zero there will still be an appreciable potassium loss in the urine. There is likewise considerable potassium present in the intestinal secretions and, with vomiting, diarrhea or intestinal intubation, large potassium losses may occur. Other factors may influence the loss of electrolytes. Stress of any type, such as operations, coronary occlusions and trauma, cause marked sodium retention and increased potassium excretion by way of adrenal cortex stimulation. Cardiac disease and impaired renal function will markedly alter the ability of the individual to either get rid of or retain sodium.

While there is not time to go into the details of the various states of imbalance relating to volume, concentration or acid-base variations, it should be obvious that there are serious results when the normal intake does not keep up with the output. Reduced to simple terms, the patient may be kept in good fluid and electrolyte balance if one can make his intake equal his output and, if this were continuously possible, one would not run into the serious clinical states of water or salt depletion. When one deals with patients having complicating features of heart disease or hypertension, or in postoperative patients in whom the normal requirements of salt are grossly altered, the balancing of intake and output becomes a formidable task.

Several methods have been reported in which an attempt is made to measure the output of sodium indirectly by measuring the chloride output in the urine and intestinal secretions. In severely ill patients this may lead to faulty estimations of the actual out-go since the sodium does not always equal the chloride output and, under certain conditions, there are marked variations in the excretion of these electrolytes. Likewise, this method does not give any indication as to loss of potassium.

I have recently reported a system for fluid and electrolyte balance which may be used in the average private hospital,[1] and which necessitates the availability of a flame photometer. The method has been in use at the Menorah Medical Center for a period of more than a year and has been found to work efficiently. The method has since been instituted in a number of hospitals in this country and abroad.

I am sure that every physician has had the experience of attempting to keep an accurate record of fluid balance on a patient and the following morning finds the previous day's urine collection has been emptied. This fluid balance system is controlled by the chemistry laboratory rather than by the floor nurses, and the nursing staff is especially grateful for not having to do this chore. Each patient who is put on fluid balance service is properly identified and labeled so that no fluids are discarded, and no fluid is given the patient except that which comes from a labeled bottle. Intravenous solutions which are given during the course of the day are left under the bed for tabulation the following day. Each morning, graduated bottles of drinking water and irrigation solutions are left at the bedside by the laboratory technician. Excretions are measured from the marked bottles of urine and intestinal fluid, and a percentage aliquot is taken from each and mixed for determination of electrolytes later. A blood sample is taken on the first and third days for a chemical determination of sodium, chloride, CO_2 and potassium. The total intake and output of fluid is recorded on the special fluid balance sheet and the electrolytes which have been determined are recorded. The balances are then tabulated and it is only necessary for the physician to replace the deficits for the previous day in addition to ordering the current day's requirements. Or, if too much has been given, the excess is omitted. For clinical purposes I have found this method works well and one is able to keep patients on intravenous fluids for periods of more than two weeks and still have them in excellent fluid and electrolyte balance.

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Hemochromatosis

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Hemochromatosis was first described in 1882 by Hartman and Chausser as bronze diabetes because of skin pigmentation associated with diabetes mellitus.[1] It is a disease in which there is a disturbance of iron metabolism with extensive deposits of iron-containing pigment called hemosiderin, found in the liver and other tissues. Extensive deposition of hemosiderin granules in the cells of the liver and other organs is known to occur in several distinct pathologic states—in idiopathic hemochromatosis, in severe malnutrition with pellagra as observed in South African Negroes, following repeated transfusions of blood or the indiscriminate use of parenteral iron preparations.[2]

The clinical picture of the disease has been amply described in the literature as one characterized by pigmentation of the skin, diabetes mellitus, hepatomegaly and hypofunction of the endocrine glands leading to diminution in sexual activity, testicular atrophy and relative lack of body hair in the male. The results of these changes produce the findings which are known as the disease hemochromatosis. It is practically unknown before the age of 20 and has its peak incidence between 45 and 55 years.[1]

Diagnosis of hemochromatosis is based on the classical picture, though frequently one or more of the previously mentioned abnormalities may be absent, and is confirmed by biopsy of the liver, skin and gastric mucosa. High serum iron levels are usually found and an abnormally high saturation of the iron-binding protein. In series of Althausen and others,[3] in which skin biopsies were done in thirteen cases, the authors were unable to demonstrate hemosiderin in the epidermis but they found that the melanin content of the cells in the basal layer was consistently increased, sometimes to a gross degree. They felt that the increase in melanin was responsible for the brown pigmentation while the slaty bluish grey appearance of some areas was probably produced by viewing an increased amount of melanin through a greatly decreased number of epidermal cells. In seven of the thirteen biopsy specimens in their series there was hemosiderin, varying in amounts from a trace to a considerable quantity, in the connective tissue cells of the corium. It was usually concentrated in the cells of the acini of the sweat glands. Biopsy of the gastric mucosa was executed by the method of blind suction, described by Wood and others.[4] Althausen[3] states that the gastric biopsy is a much more reliable aid than histologic examination of the skin if the presence of hemosiderin is used as a diagnostic criterion. In the *Quarterly Journal of Medicine,* April 1952, Houston and Thompson,[5] and the March 1952 *Journal of Laboratory and Clinical Medicine,* Gitlow and Beyers,[6] describe serum iron studies in hemochromatosis. Gitlow and Beyers[6] have employed a technic using 10 mg. of intravenous iron as a tolerance test and have found in hemochromatosis a normal or high serum iron and normal or low total iron-binding capacity with a high degree of saturation of the iron-binding protein. Such a test as this may well make earlier diagnosis possible in the future.

PATHOLOGY[1]

The pathologic changes characteristic of the disease are the pigment deposition, fibrotic changes and the cellular degeneration of certain parenchymal organs. Anemia is rare in hemochromatosis, the average blood values being 4.1 million red blood cells and 80 per cent hemoglobin. There are two kinds of pigment found in hemochromatosis, hemosiderin and hemofuscin. As has been said before, hemosiderin is the iron-containing pigment and is the predominating pigment of hemochromatosis with an extreme affinity for gland cells of both external and internal secretion. The greatest amounts are found in the liver and pancreas, whereas the kidneys and germinal epithelium of the testes are usually uninvolved. Striated muscle is affected, but smooth muscle is not. The heart muscle is often heavily pigmented. Considerable quantities of pigment are found in the recticulo-endothelial system. They occur in the Kupffer cells of the liver, the septal cells of the pulmonary alveoli and in the spleen. In structures where there is much pigment in the tissue cells there is almost always pigmentation of the connective tissue as well, this being especially so in the liver and pancreas. Hemofuscin is a dark, almost black pigment, which apparently contains no iron though Best and Taylor[7] call it an iron-holding pigment. It contains about 3.7 per cent sulphur and is probably related to melanin. In hemochromatosis it occurs to a slight extent in the epithelial cells of the glandular organs, but with more frequency in the connective tissue, especially that of the spleen. There is nearly always a large quantity in the heart muscle, but its site of election is in the smooth muscle of the genital and alimentary tract and the smooth muscle of arteries. An invariable feature of the disease is cirrhosis of the liver, usually of hypertrophic type. The pancreas is always constantly affected though usually less severely. In contrast to the changes which occur in the liver, pigmentation and

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cirrhosis do not always go hand in hand in other organs and there may be an advanced interstitial pancreatitis with only a small amount of hemosiderin. The spleen nearly aways shows some fibrosis as does the heart, thyroid and salivary glands. Investigation reveals a great increase of iron in the various organs; the concentration may be 50 to 100 times normal in the liver, pancreas and salivary glands. Total amount of iron in the body has been estimated at from 20 to 58 grams of which as much as 38 grams has been found in the liver. The disease is invariably fatal, death resulting from diabetes, cirrhosis of the liver, heart failure or, in the past, from secondary infection. In the *American Journal of Medicine,* November 1951, Marble and Bailey[8] reported thirty cases with twenty-seven deaths. In these fifteen autopsies were performed. Causes of death were given as follows: Pneumonia four, diabetic coma one, cardiac six, rupture of varices one, peritonitis one, cancer of the liver three, "hemochromatosis" eleven. It can be seen that cancer of the liver accounted for twenty per cent of autopsied cases. Death results within one to three years after recognition of the disease, but this is not invariable.[8]

The treatment of the disease has been in the past purely one of treating symptoms and complications. Therapy for cirrhosis of the liver plus the usual form of treatment for diabetes has been all that one could offer these patients. Davis and Arrowsmith[9,10,11] since 1947 have followed six patients with a diagnosis of hemochromatosis, established by needle biopsy of the liver. They have treated their patients in the following manner: Bleeding, at the rate of 50 ml. aliquots every four to eight days was performed, until 100 or more liters of blood had been removed or until a mild hypochromic anemia had been induced. Plasma and cells were separated, the cells being discarded and the plasma reinfused in order to conserve protein stores. An average of 24 to 45 liters of blood was withdrawn annually from each patient. This, they figured, represented a net annual loss of 12 to 20 grams of iron. In addition they treated the cirrhosis and diabetes with a diet of 500 grams of carbohydrate, 200 grams of protein, and minimal fat, plus 15 grams of Brewer's yeast three times a day and multiple vitamin capsules. Insulin was given when needed. They noted in these patients a prodigious ability to manufacture hemoglobin and red blood cells and subjective improvement was noted in all. The authors stated that the evidences of hemochromatosis, bronze skin, diabetes, liver functional abnormality and electrocardiographic changes improved in each case in which they were exhibited. Serial liver biopsies demonstrated diminution of iron pigment in the liver with complete disappearance when bleeding was sufficiently vigorous and prolonged. They pointed out, however, that the cirrhosis of the liver remains in spite of the disappearance of the iron. They have stated, however, that in those instances in which fatty infiltration and inflammation were present, diminution and finally disappearance of these changes took place as occurs in ordinary cirrhosis under the usual good dietary therapy. Davis and Arrowsmith[10] also reported cases collected by other observers. In one series seven out of seven cases showed improvement and in another thirteen out of fifteen cases showed good results. Warthin, Peterson and James H. Barr, Jr.[19] report a case of idiopathic hemochromatosis treated with repeated venesection over a three year period, with marked improvement in the course of the disease. It is concluded that this form of treatment offers hope as an alleviating measure.

IRON METABOLISM

Iron metabolism is carried on to a large extent on what one may almost term a "dead-end street" in normal individuals. The metal is absorbed through the gastrointestinal mucosa. Its chief storage depot is in the liver from which it is removed when needed for conversion into hemoglobin; but the excretion of iron is in only minute quantities. Small amounts of it are excreted in the bile and possibly thence into the intestines; some is excreted in the urine presumably by way of the epithelium, and small amounts are lost through the skin. It has been thought that this last was in the sweat but this conjecture has recently been disputed and the iron now is considered to be lost through desquamated epithelial cells. Under normal circumstances the average meal contains approximately 5 mg. of iron of which only about 0.5 mg. may be absorbed. Thus about 1.5 mg. per day is absorbed; and it has been estimated that the body may lose a total of 1 mg. or less of iron per day. One would suspect, therefore, that a vast store of iron would be taken to the grave in all normal individuals. That this is probably not the case is due to the fact that the absorption of iron through the intestinal mucosa is apparently regulated by the amount of iron deposits in the body. In the *Bulletin of the New York Academy of Medicine* in July 1949, Granick[12] has postulated the means by which iron is absorbed from the intestinal tract. A quotation from an article by Dubach, Callender and Moore[13] in the May 1948 issue of *Blood* best summarizes Granick's theory. "Granick has postulated the following explanation of absorption: The intestinal mucosal cells contain a protein, apoferritin, which combines with iron to form ferritin. The ferritin iron is thought to be in equilibrium with small amounts of ferrous ions in the cells, and the ferrous ions in turn are postulated as being in equilibrium with the iron in plasma. According to this concept, iron is taken up by mucosal cells until all the apoferritin is converted into ferritin. No more is absorbed until some of the ferritin has given up its iron to plasma. This theory explains beautifully the fact that iron-deficient subjects absorb more iron than do normal persons. It does not account adequately, however, for an equally clear demonstration that patients with pernicious anemia in relapse, with refractory anemia, or with hemolytic anemias may also absorb fairly large amounts of the metal even though their tissues are replete with iron. If the intestinal mucosa is a major regulator of iron metabolism, protecting the body from uptake sufficiently great to cause toxic concentration in the tissues, it at least is not as complete a regulator as it was first thought to be. . . . Uptake from the intestinal tract has been shown to be independent of the plasma iron concentration. On the other hand, if tissue iron reserves of subjects with hypochromic anemia are partially restored by the parenteral administration of large amounts of iron, uptake of the metal from the alimentary tract becomes less complete. The possibility has been explored that a factor may be present in the blood of iron-deficient subjects which stimulates absorption, but in two unpublished experiments the infusion of large amounts of plasma from iron-deficient into normal dogs has failed to affect the quantity absorbed. The mucosal block theory of Hahn and Granick remains the best explanation for all the known facts about iron absorption, but the 'block' should be thought of in relative terms."

The iron in the serum is transported by siderophilin, Beta$_1$ globulin protein, with a molecular weight of 90,000. Normally this protein is only one third saturated with iron. The iron is then stored in the liver as ferratin where it is available for use by the body.

The cause of hemochromatosis has been the subject of debate for many years and today, while concepts have changed, the exact cause is uncertain. Even the last edition of Best and Taylor,[7] 1950, states that Mallory ascribes it to chronic copper poisoning. He states that the excretion of iron is interfered with; the hemoglobin liberated as a result of the normal wastage of red cells, and combines with copper to form cuprohemol. The foreign metal is later freed and hemofuscin formed. This is then converted by tissue enzymes to hemosiderin which induces necrosis and fibrosis of the tissue at the site of its deposition. It is not believed today that interference of excretion of iron is considered of much importance in the etiology of the disease. True, it is far more common in men than in women, which fact is usually explained by the normal loss of blood through menses and childbearing in women; but it is generally considered to be a fault in the absorption of iron. Dubach, Callender and Moore[13] in the article referred to, had one patient with hemochromatosis whom they studied with radioactive iron given by mouth. Twenty per cent of the iron was retained by the hemochromatosis patient whereas the normal person would retain 2 per cent or less of such a dose. This was the first direct evidence demonstrating that in hemochromatosis iron absorption is greater than normal.

Less perfectly understood is the cause of the changes found in hemochromatosis as a result of or following the increased iron absorption. The first organ generally to be affected is the liver, being the primary storehouse for iron. If iron continues to be brought to the liver Granick[12] has postulated the following sequence of events: "The excess iron probably will continue to deposit on the already existing micelles increasing their size, and the links between micelles will tend to unite ferritin molecules to form clusters that eventually become large enough to be visible under the microscope (that is, the hemosiderin granules). At the same time a portion of this iron may begin to spill over into other organs to be converted to ferritin and the excess finally to be deposited in the form of hemosiderin." Does hemosiderosis cause the fibrosis which results in hemochromatosis? This question is certainly unanswered today though there is evidence suggesting that in all likelihood it does. One argument against this mechanism can be given in two examples. One is the gastric mucosa in which hemosiderin granules may be present in large amounts in the chief cells and secretion of pepsin remain normal. Another instance is the fact that the severity of the diabetes when present is independent of the amount of hemosiderin in the pancreas. There are other conditions in which hemosiderin is deposited in the liver without the development of hemochromatosis; examples of this are malaria, pernicious anemia and the hemolytic anemias.

Of probably less fundamental importance are many other factors which have been considered by various authors. Althausen and others[3] in the *Archives of Internal Medicine,* 1951, reported a series of twenty-three patients, twenty of them being men and three of them women. Sheldon[14] in his monograph listed a total of 311 acceptable cases, of which sixteen were women. These series indicate the strong predominance of males and, as pointed out previously, the sex difference ascribed to the increased ability of women to rid themselves of iron during their active menstrual lives. In Althausen's[3] cases his three females showed markedly reduced menstrual flow. Several authors have noted the familial backgrounds of some of their cases, but this is not often stressed in the literature. In Althausen's[3] series he found a history of hemochromatosis in the brother of one female and of one male patient; a family history of excessive pigmentation was found in four cases, diabetes mellitus in four and hepatic disease in three. Lawrence[15] in 1939 reported on the familial incidence of the disease in a family of nine siblings. Of the four males two had typical hemochromatosis, the third had a borderline case, while the fourth was unaffected. In Althausen's[3] series a large majority of the male patients had a moderate to marked sparsity of body and facial hair all their lives. He felt that the presence of sparsity of hair at puberty in a large majority of his male patients might be an early manifestation of the disease. He and several other authors have thought that these facts all point to an inborn predisposition to hemochromatosis. An interesting fact which cannot be explained is found in "transfusion hemosiderosis" or hemochromatosis resulting from transfusion. If one calculates the iron administered to these patients in the form of blood transfusions it does not nearly account for the total amount of iron found in these patients. This finding, of course, would seem to point to an innate predisposition toward the disease in these patients. Althausen[3] did not find that nutritional factors played any part in the etiology of the cases in his series. Gillman and Gillman[16] had reported that certain grossly abnormal diets in South African Negroes led to increased absorption and storage of iron, as well as to lesions in the liver. As a result of their investigations and certain other experiments, the changes are now attributed to the disturbance in the iron-phosphorus ratio in the diet, while fat and fibrous changes in the liver can be ascribed to deficiency of dietary protein. Althausen[3] therefore felt that diet was not a notable factor in the production of the disease in his patients.

Another interesting possibility is suggested in the March 1952 *American Heart Journal.* An article by Bothwell et al[17] on cardiac complications of hemochromatosis, reports heart failure in a young adult woman with hemochromatosis. The authors point out the complete lack of correlation between the extent of iron deposition in the myocardium and the presence of heart failure. They refer to another young patient, also in his early twenties, with heart failure. Their studies of iron uptake indicate that young subjects with hemochromatosis absorb greater quantities of iron from the gut than do older subjects. They point out the much higher incidence of heart failure in the younger age group and conclude that the damage to the myocardium is not related so much to the degree of iron deposition as to the rate at which it is being laid down. However, there is plenty of experimental evidence contradicting this last supposition. Brown and others[18] gave 0.5 or 1 gram of iron per kilogram of body weight intravenously to four dogs. The amount injected daily varied from 100 to 300 mg. of iron and the time required for administration of the total quantity varied from forty-four to sixty-eight days. Biopsy specimens were obtained from the liver, spleen, pancreas, mesenteric lymph nodes, skeletal muscles and skin. These showed iron pigmentation of the liver, spleen and mesenteric lymph nodes, with less pigment in the pancreas, kidney and skin, and practically none in the skeletal muscle; there was no increase in the fibrous tissue in the liver, pancreas or other organs and no cirrhotic changes. Certainly these are vast amounts of iron which were received at a reasonably rapid speed in young dogs and would seem to argue against Bothwell's supposition, though one must remember that Bothwell was considering cardiac changes primarily.

Thus one can only surmise today that hemochromatosis results from an altered absorption of iron plus some inborn predisposition to the disease.

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How Come?

. . . At recent Council meetings . . . there have been suggested a variety of ways of improving the attendance at . . . meetings. There is no time or place available that would insure a large regular attendance at a scientific meeting—unless you include . . . door prizes. The final fact remains that even if the great Dr. Ersnatz P. Poofdoodle of the University of Cologne was going to speak on that interesting subject "Hermaphroditism in the Turtle"—if you were not interested in turtles—you wouldn't be there!—J. J. Lightbody, M.D., *Detroit Medical News.*

Congenital Dislocation of Hips

Home Treatment

GARRETT PIPKIN, M.D., *Kansas City*

In these days of increasing medical costs and acute shortages of hospital beds, it is indeed encouraging to report that a method has been evolved for treating congenital dislocations of the hip at home when it is diagnosed at an early date. If the results of this method only equaled those formerly obtained by manipulation and casts, it still would be much worthwhile as it eliminates the anaesthesias, the manipulations and the long months in plaster casts. Over and above these improvements it offers:

1. In cases of unilateral dislocation of the hips, symmetrical legs are a more probable end result than were formerly obtained from cast methods.
2. The complications of avascular necrosis are less.
3. Secondary rotation osteotomies are not necessary.
4. There is no need to separate the parents and the infant during the period of treatment.

Frejka,[2] of Bruno, Czechoslovakia, during the years of World War II, was faced in his clinic with such large numbers of patients with congenital dislocation of the hip, and with paucity of personnel, hospital facilities and actual shortage of plaster itself, that some other method of handling these cases had to be developed; i.e., other than the time honored reduction under anaesthesia and cast method. He hit upon the happy solution of a pillow splint. All treatment is carried out at home by the mother. The essential tool is a pillow which is folded into the groin of the patient and pinned there by the mother (figure 1). Successive daily changes, each time taking up a little more slack over a period of several weeks, or months, gradually bring the inferior extremities into the frog position. When this attitude has been effected, roentgenograms then show that the reduction has spontaneously occurred in a reasonable percentage of cases (figures 2 and 3).

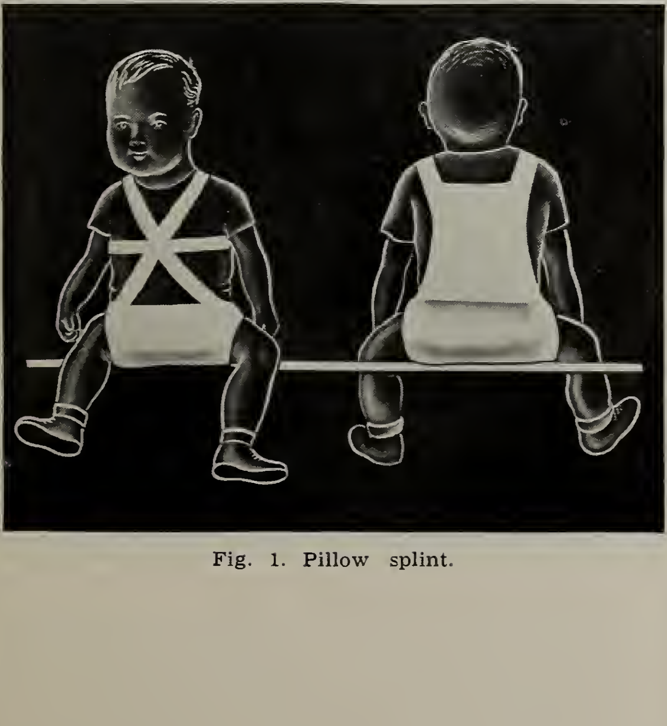

Fig. 1. Pillow splint.

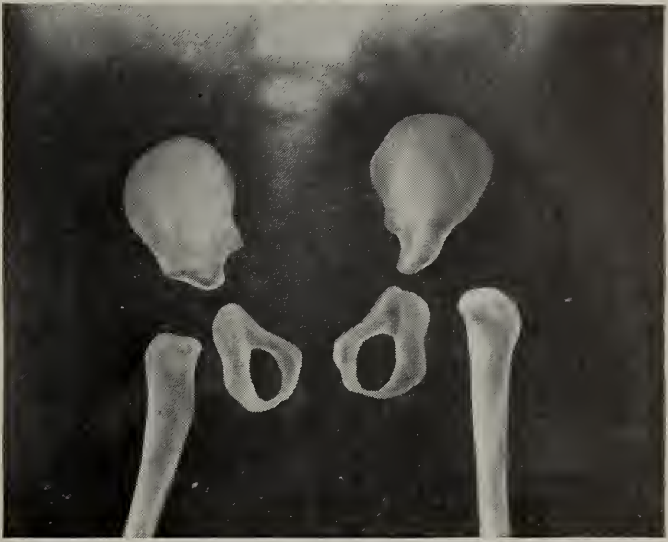

Fig. 2. Before reduction with pillow splint.

As previously stated, in order to utilize this method, a diagnosis must be made at an early date.

The diagnosis of congenital hip dislocation should be obvious to the expert from variations in skin folds in the gluteal area. The nursing staff of the infant section should at least suspect its presence immediately from limited motion, which interferes with the application of a diaper (figure 4). The dislocation can then be confirmed by roentgenogram examination. This particular diaper test should be included in the training of the staff involved in handling the newborn. Figure 4 might even be placed in a prominent place in the hospital nursery.

Recently, the theoretical aspects of congential dislocated hips have been complicated by the introduction of such terms as "primary dysplasia." This may be a good term for the embryologist but it has little practical value to the clinician, from the standpoint of treatment. I prefer the simple classification of dislocated hips as proposed by McCarroll and Crego[3] as follows: (1) simple luxation, (2) posterior dislocation, (3) anterior dislocation.

Both simple luxations and early posterior dislocations respond easily to the treatment employing the pillow splint. Anterior congenital dis-

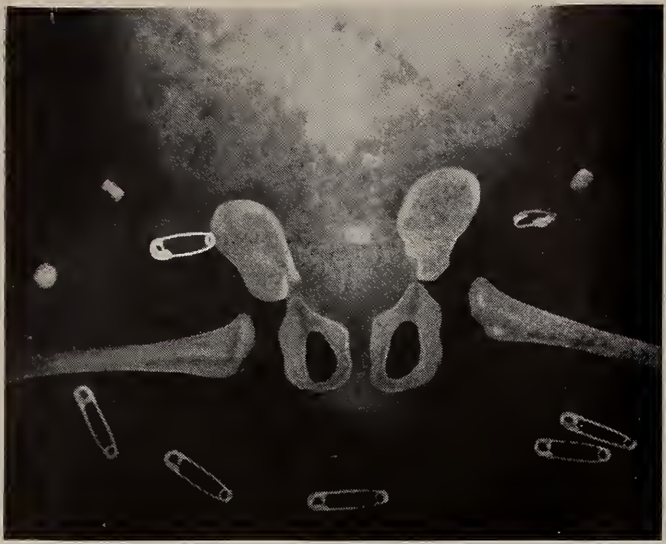

Fig. 3. After reduction with pillow splint. Patient is aged 6 months, time interval from figure 2 is one month.

location is quite rare, requiring treatment involving a different set of anatomic principles which are not within the scope of this paper.[3]

TREATMENT

The principle of the pillow splint has undergone some refinements. Frejka described a cover with straps into which the pillow could be fitted. This cover made it easier to maintain the desired position and could be removed for laundry.[2] The pattern of such a cover for a child one year of age is shown in figure 5. Any seamstress of only average ability can produce such a cover in several hours; or these covers may be obtained from a commercial firm in a choice of three colors: white, blue, or pink, including a plastic protected pillow at a cost of approximately $12.50.*

There are no particular difficulties in managing the pillow splint. The mother removes it as often during the day as is necessary. A routine daily bath with soap and water, followed by powder is advisable, as in any other infant. Should the hip be brought into neutral from the abducted position during these periods of change, no harm is done, although the mother is impressed with the importance of constant continuous frog positioning on her periodic check visits.

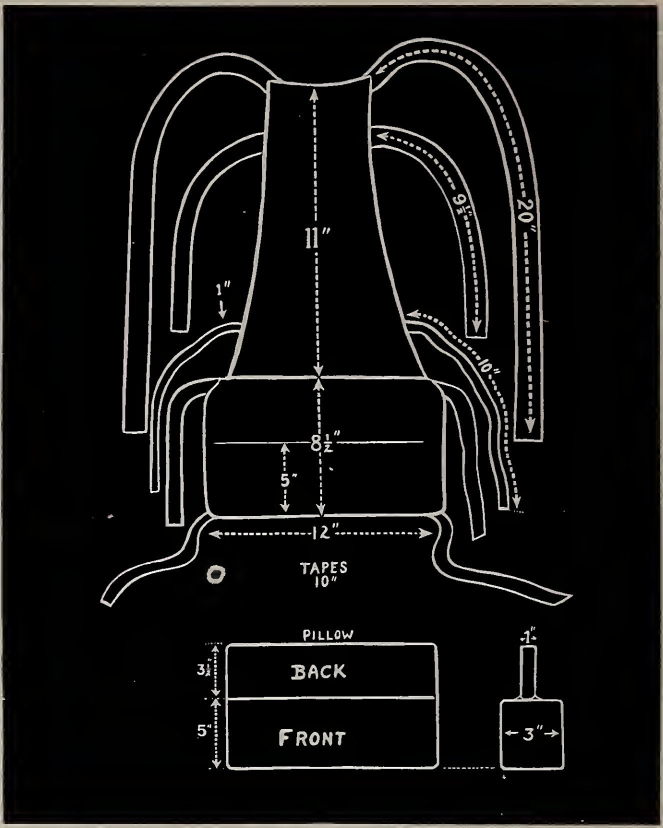

Fig. 5. Pattern for pillow splint and cover for patient 1 year of age.

Somewhere from about 1 year of age up these children attempt to stand and then to walk. Frejka permits his cases to do so wearing their pillow splint, and the waddle gait of such an in-

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* Minnesota Orthopedic Services, 4035 Regent Avenue North, Minneapolis, Minn.

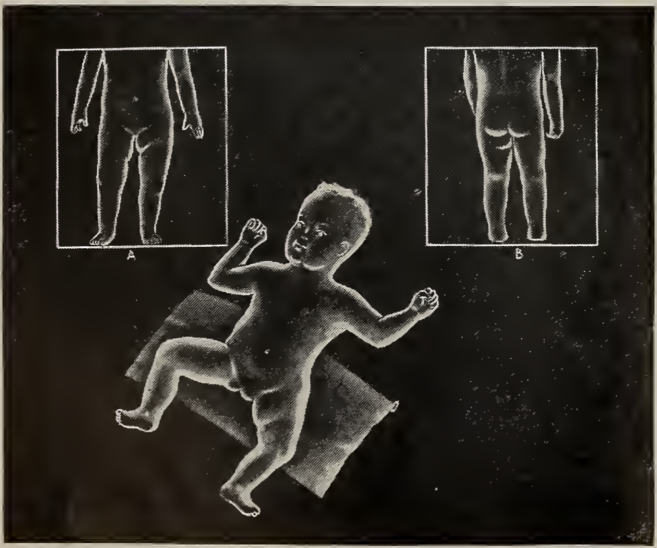

Fig. 4. Diaper test.

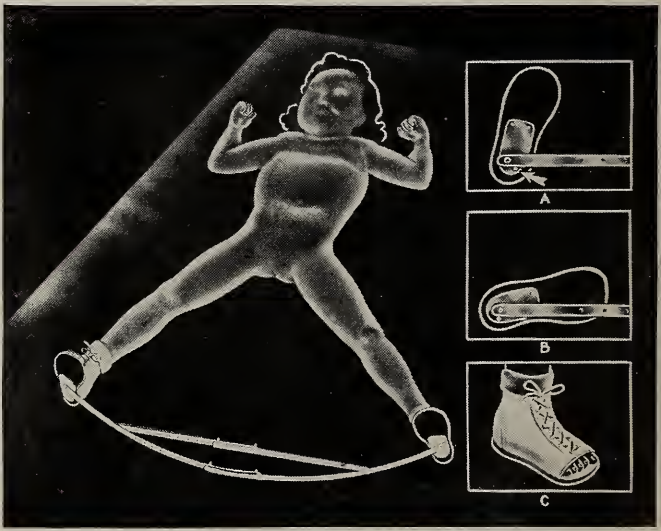

Fig. 6. Ponseti abduction-internal rotation bar. A and B show details of internal rotation stop. C shoes toes cut out for check on slipping.

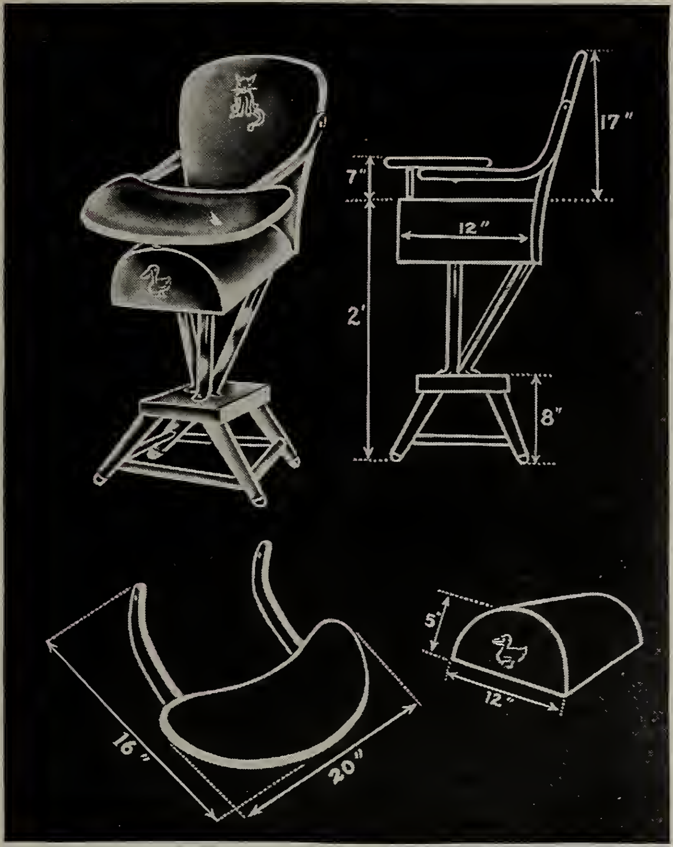

Fig. 7. Highchair for pillow splint or Ponseti bar.

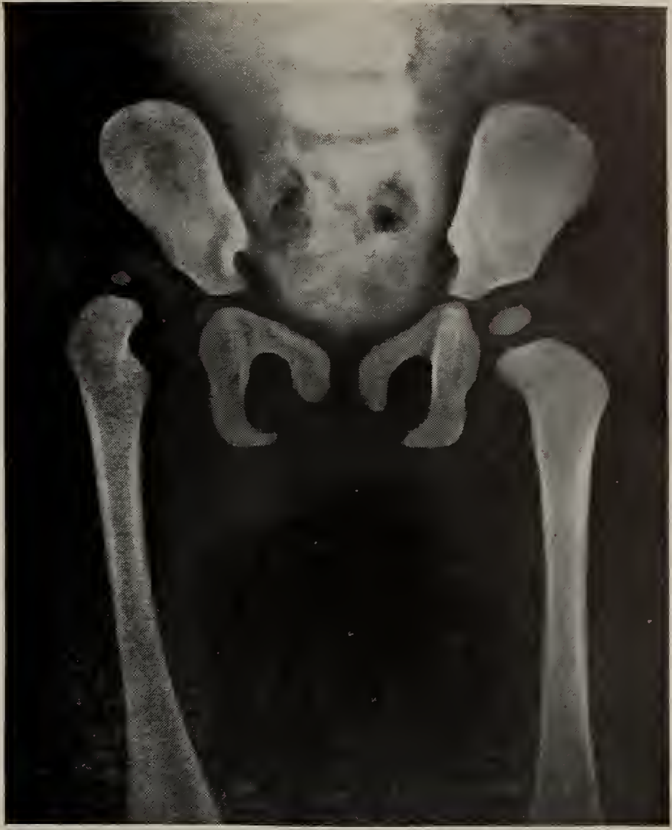

Fig. 9. Congenital dislocation at age 18 months.

fant with a pillow between his thighs is a wonder to see. Certainly, Frejka reported, and American observers verified, excellent reductions and development of femoral head and acetabulum with no further treatment than the patient walking with the pillow splint.

Current American thought on the subject of early weight bearing is based upon the development of the acetabulum. The feeling is that after reduction these hips should be maintained in wide abduction and internal rotation until the ball and socket are well developed. This requires continued splinting for two, three or four years. The length of time is determined by serial roentgenogram examinations. Ponseti[4] has designed an abduction splint with an external rota-

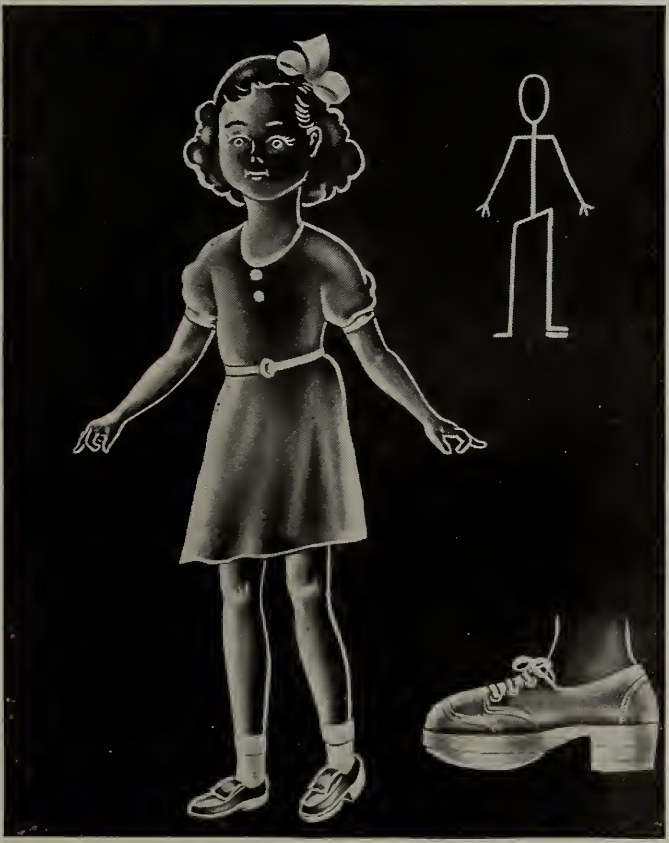

Fig. 8. In unilateral cases elevate good shoe one inch when starting weight bearing.

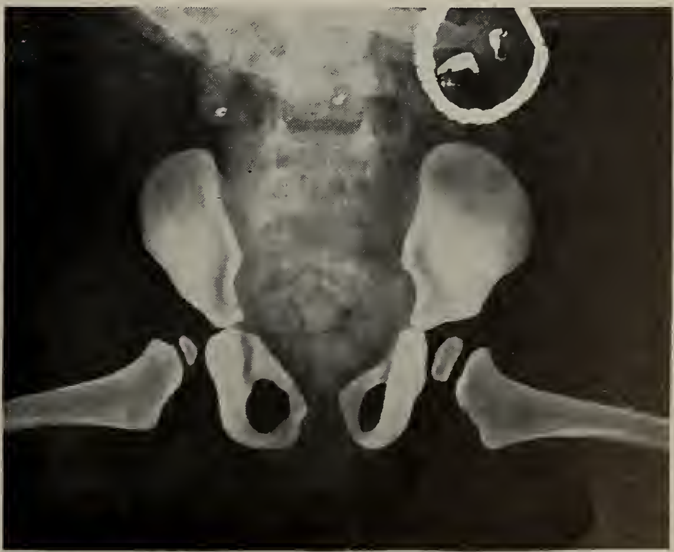

Fig. 10. Six months after reduction, patient in figure 9.

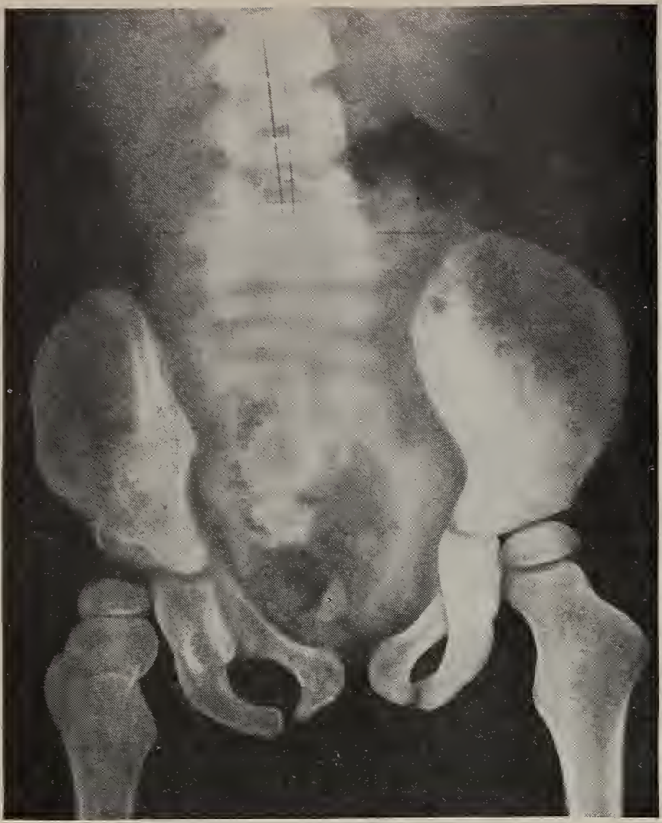

Fig. 11. One year later. Hip is still unstable, patient in figures 9 and 10.

tion block which may be clamped or plated to the infant's shoe (figure 6). The rotation block, he claims, permits development of the internal rotators. Compere[1] has independently reported a similar abduction splint which may be suitably adjusted so as to decompress acute internal rotation gradually to neutral, obviating the necessity of rotation osteotomies. My experience has paralleled that of Compere. I have not done a rotation osteotomy since shifting to the abduction splint for the post reduction developmental stage.

Two comments can be made on the use of the abduction or Ponseti bar: children will eventually stand and jump on it, breaking the spreader, as incredible as that may seem. Hence, a bracing bar has been added (fig. 6).

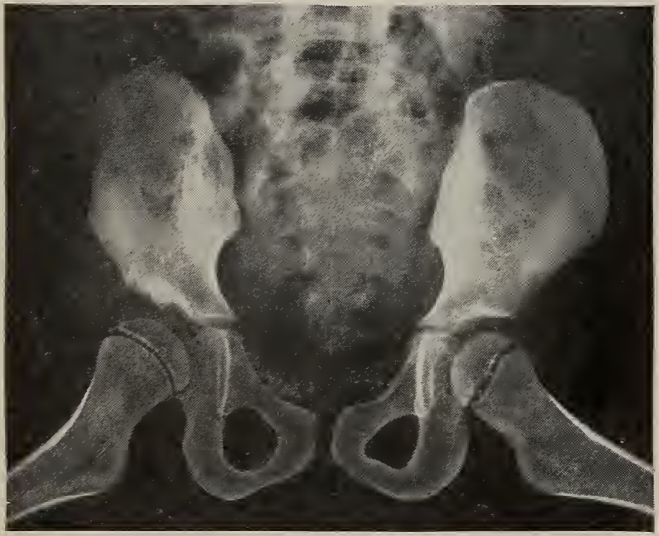

Fig. 12. Same patient at 48 months of age. Night splint discontinued.

It is difficult at times to determine whether the infant's foot is properly seated in the shoe. Also the child may be fretful, in the middle of the night, after having been asleep for several hours. Has the foot slipped? Should the splint be removed, or should some other cause for the fretting be looked for? To obviate these practical considerations it is best to cut out the toe of the shoe sufficiently to expose the tips of the toes (figure 6c). In this way the parent applying the splint can more readily judge whether or not the foot is correctly placed in the shoe. Parents should also be instructed to lace the shoes loosely. Tight lacing, such as would be used were the child walking, is not necessary to maintain the abduction splint on the feet and might result in circulatory embarrassment.

The active child will soon learn the trick of sitting and crawling with the knees flexed, even though the abduction splint seems at its maximum width. Such activity prevents atrophy, and the extremities remain symmetrical. A mild knock knee develops, which has been corrected later with an inner heel wedge. The abduction splint has not been interrupted because of the developing knock knee.

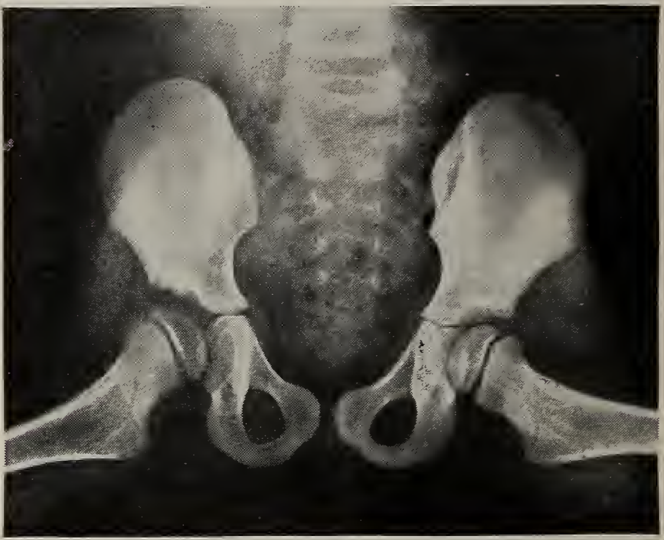

Fig. 13. Same patient at 60 months of age.

Ingenious parents have built special play pens and various types of child furniture to accommodate the pillow and abduction splints. Of these a high chair has been the most practical (figure 7).

When serial roentgenograms show the reduction stable, weight bearing is permitted through the day, with the abduction splint continued only at night. In unilateral dislocations a one inch heel lift with one half inch sole lift on the good side tilts the pelvis so as to maintain abduction of the affected hip when ambulatory (figure 8).

The criteria for length of treatment after reduction is, of course, stability. Stability depends upon development of an adequate femoral head and acetabulum. The serial roentgenogram examinations in figures 9 and 10 are at one year intervals after reduction. At the end of one year's treatment the left hip is still unstable (figure 11). The abduction splint was continued another nine months before permitting daytime standing or walking without the splint, and then with the pelvis tilted by a high heel on the opposite side. The splint was continued at night for an additional two years. Children seldom object to "sleeping with their shoes on." The parents must be mentally prepared for the innovation, as they are ingenious at raising all sorts of objections.

The pillow splint reduction is practical up to 2 years of age, and in rarer cases up to 3 years.

A time table for an ideal case of pillow splint reduction and abduction bar treatment is as follows:

1. Early diagnosis, zero to 9 months of age.
2. Reduction and maintenance of reduction by pillow splint until 1 year of age. This is about the earliest age at which a shoe can be put on the foot so that the abduction splint will hold.
3. Abduction and internal rotation splint (Ponseti type) twenty-four hours a day for one or two years. Splint may be removed for bath and exercise period not involving weight bearing.
4. Transition to weight bearing without the splint, until it is only worn at night.
5. Night splinting until the child is 4 years of age.
6. In unilateral cases, upon permitting weight bearing without the splint, use a lift on the opposite shoe to tilt the pelvis.
7. Criteria for termination of splinting is the development of an adequate acetabulum and femoral head without rotational neck deformity.

SUMMARY

1. The pillow splint method of Frejka presents a practical, atraumatic method of reduction on a home treatment status.
2. The reduction should be protected by an abduction-internal rotation splint until a stable hip has resulted.

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"Ten Weigh a Ton"

. . . obesity precedes the onset of diabetes in 85 per cent of individuals past forty years of age, and the further fact that of all pathologically obese individuals (20 per cent above normal weight) one out of five is diabetic. . .

. . . one is forced to conclude that obesity is as important as heredity in the etiology of diabetes . . . evidence of war undernutrition proves overnutrition has a greater influence on diabetes mortality than heredity. Perhaps one would better say that the hereditary diabetes, because it is recessive, will not become apparent unless overnutrition be present, at least in the greater majority of cases, and particularly in the later years of life.—"Obesity: Key to the Prevention of Diabetes," *Journal of the Michigan State Medical Society,* William H. Olmsted, M.D.

---

10 Per Cent

. . . reviewing the attendance record for 1952, it shows an average attendance (at County Medical Society meetings) of forty-four. . . . This to me is tragic in the light of a membership of approximately 320. The attendance to date this year has averaged thirty-three—a decrease rather than an increase. We ask the question, "What is wrong?" and follow with a second question, "What can be done about it?" . . . If you have any suggestion as to a method of kindling interest, pass it on to your officers; adequate consideration will be given.—Guy N. Magness, M.D., *St. Louis County Medical Society Bulletin.* (See following. Ed.)

Old Patients Are People

. . . The field of health control for older persons is not well recognized by clinical medicine. Geriatric medicine should emphasize the control of health, and to do this it must not wait until the elderly persons arrive at an advanced state of ill health.

. . . The study of an older person must consist of an over-all evaluation of the patient, with particular tests of individual organs, as well as of the over-all functions of the body. It has been established that medical control of diseases that develop in the older person is of primary importance in the maintenance of health but that adjustment of the person to his environment and a feeling of importance in his social relationships assist in this program.—"Therapeutic Aspects of Geriatric Medicine," *J.A.M.A.,* Oct. 1953, William B. Kountz, M.D.

Tic and Teeth

. . . Correction of temporomandibular joint dysfunction will relieve the pain of trigeminal neuralgia in many instances.

. . . Of 54 patients seen in the past three years at St. Louis University, correction of the malocclusion relieved 36 and failed with 11; partial relief was obtained by 7.

. . . When repositioning fails to relieve, surgery is always available.

. . . Facial features are studied to determine the effects of occlusal wear. Treatment consists of increasing the vertical dimensions, replacing missing teeth, and establishing a new centric position. *Postgraduate Medicine,* "Trigeminal neuralgia and mandibular joint dysfunction," Edmund A. Smolik, M.D., and E. J. Hempstead, D.D.S.

Dibenamine in Psychoneurosis

W. M. GANSLOSER, M.D., *St. Louis*

Many psychoneurotic patients present themselves for treatment with complaints referable to hyperactivity of the sympathetic nervous system: tachycardia, palpitation, pulsating headaches, sweating of the extremities, gastrointestinal hypermotility.

As a technic in formulating rapport more rapidly and in removing these symptoms quickly, blocking of the sympathetic system with drugs was attempted.

In a review of the drugs affecting the autonomic nervous system, Evelyn[2] names the imidazolines, the benzodioxane derivatives, the ergot alkaloids and the dibenamine* group. Dibenamine[1] is a synthetic blocking agent structurally related to nitrogen mustard. It blocks the action of circulating adrenaline and also inhibits the response to the sympathetic nervous system stimulation. It seems to act on the receptive mechanism. A single dose may last up to four or five days, but this has been found only in pharmacologic experimentation.

The surgical interest in sympathectomy has been explored by Henry Haimovici[3] at Montefiore Hospital. He used an intervenous technic in hypertension, peripheral vascular illnesses and pheochromocytoma. He also attempted oral administration in arterial hypertension and peripheral vascular diseases in outpatients.

Dibenamine was given in tablets enterically coated, 130 mg., and the dosage was one or two tablets, three times a day. Twenty-five patients with marked symptoms, objectively and subjectively, of increased activity of the sympathetic component of the autonomic nervous system were used. It was suggested to the patient that this drug would remove symptoms and allay the patient's anxiety about these symptoms.

Of the group, four patients had complete amelioration of symptoms after the second day and refused to continue psychotherapy. They felt that symptom removal was sufficient. The remainder developed gastrointestinal symptoms which increased their anxiety, e.g., nausea, vomiting, diarrhea. An intervenous technic was not attempted because these patients desired to remain on an office basis.

It was hoped that with the removal of the presenting symptoms that more dynamic and basic material could be obtained more quickly.

It is hoped that a less toxic drug to be administered by mouth will soon become available. The derivatives of dibenamine are many and have not been investigated completely. Since psychoneurotic patients compose from 50 to 80 per cent of every physician's practice, its clinical application would be welcomed.

6376 Clayton Road

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3. Haimovici, Henry: Clinical Applications of Adrenergic Blockade in Vascular Diseases with Special Reference to Dibenamine, Angiol. **2**:531-554 (December) 1951.
4. Rogers, N. P., and Yorkman, F. F.: Am. J. Digest. Dis. **19**:144 (May) 1952.

BOOK REVIEW

Advances in Medicine and Surgery, from the Graduate School of Medicine of the University of Pennsylvania. W. B. Saunders Company, Philadelphia & London. Price $8.00.

This book consists of ten separate symposia and has fifty-five contributors. This volume does not represent simply the proceedings of a course; rather it represents publication of a course which was planned carefully as a series of symposia dealing with ten topics of considerable interest to practicing physicians. The subjects were selected because of recent advances and current interest in them following the basic philosophy of the graduate school of medicine that the why and the how should be taught side by side, the symposia were developed from both the fundamental and clinical points of view.

It is quite evident that a tremendous amount of work and study is in the background of each chapter, especially the chapter, "The Present Status of Adrenal Cortical Hormones." The additional subjects are: "The Role of Potassium in Health and Disease," "Hypertension," "Newer Aspects of Medical and Surgical Treatment," "Newer Concepts in Preoperative Evaluation and Preparation of Patients," "Thromboembolism," "Pulmonary Infections," "Relief of Pain," "Current Status of the Cancer Problem," "Recent Developments in Virile Diseases," and "Functional Disorders."

The information set forth is concise, to the point and, most important, is current, both fundamentally and clinically. As was intended, this book will be of great benefit to any physician in any field of medicine or surgery at the time it is first read and throughout the year as it is reread and used as a desk reference. Ample current references on the subject covered are supplied at the end of each chapter.

The illustrations are excellent throughout, demonstrating the discussion. The style is clear, straightforward, and to the point. The type is easily read, and the paper used is of excellent quality. This book is of manageable proportions and is an achievement worthy of its source, The University of Pennsylvania, Graduate School of Medicine, and the fifty-five distinguished contributors. L. W. B.

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Postgraduate Review

Evaluation of Cerebral Palsy Treatment

D. ELLIOTT O'REILLY, M.D., *St. Louis*

ON MONDAY, August 25, 1947, the first formal Cerebral Palsy Clinic was held at Firmin Desloge Hospital under the auspices of the Missouri State Crippled Children's Service. About 250 children have been seen in the clinic since that time. These patients have returned at intervals of three or four months for medical care and supervision of home programs of speech and physical training. Special equipment such as standing tables and special chairs have been prescribed as needed, as well as braces.

In July 1951 an evaluation team consisting of a pediatrician, a neurologist and an orthopedist began to reevaluate those patients who return for examination.

By definition cerebral palsy is an abnormality of the brain resulting in disturbance of motor function. In this study a classification was used based on clinical symptoms as outlined by Perlstein:

1. *Spasticity.*—Pyramidal tract involvement, characterized by stretch reflexes, increased muscle tone, hyperactive reflexes, positive Babinski and others.
2. *Athetosis.*—Basal ganglion involvement, characterized by involuntary, incoordinate, uncontrollable, purposeless movements with varying degrees of spasm or tension. Athetosis is actually one of a group of hyperkinesias which also include dystonias and tremors.
3. *Ataxia.*—Involvement of the cerebellum and its tracts, characterized by loss of balance sense, hypotonia and dyssynergia.
4. *Rigidity.*—Diffuse brain damage, characterized by resistance to slow passive motion, which is usually intermittent, and by disturbance of agonist-antagonist relationships.

In making this study all cases seen in the Cerebral Palsy Clinic from its start until July 1951 who have returned for examination have been included. An attempt was made to review the records of those who did not return but there was insufficient information for valid conclusions. The evaluation consisted of comparison of the original and present conditions. Psychometric tests and electroencephalograms were done when indicated. It was impossible to make a purely objective evaluation of the progress made by these patients because of lack of time and personnel; however, evaluations have been as objective as possible, although many subjective factors enter into the decisions.

A total of 145 cases were evaluated, of whom 123 were confirmed as being afflicted with some form of cerebral palsy, as follows:

TABLE 1

	Number	*Per Cent*
Spasticity	57	46.3
Athetosis	40	32.5
Ataxia	4	3.3
Rigidity	22	17.9
	123	100.0

The remaining twenty-two patients who had been treated as having cerebral palsy fell into the following categories:

TABLE 2

Mental Deficiency	15
Deafness	1
Encephalitis	2
Epilepsy	1
Other	3
	22

Of the 123 diagnosed as having cerebral palsy, eighty-two showed varying degrees of improvement, whereas forty-one showed no appreciable change. The prognosis was best for the spastic and poorest for the rigidity cases, as follows:

TABLE 3

	Improved	*Unimproved*
Spasticity	45	12
Athetosis	29	11
Ataxia	2	2
Rigidity	6	16
	82	41

In evaluating the results, the initial and present conditions of the patients were classified as:

1. Independent.
2. Requiring slight help.
3. Requiring moderate help.
4. Requiring much help.
5. Helpless.

The following table shows the changes in those cases who improved:

Senior Instructor in Orthopedic Surgery, St. Louis University School of Medicine.

Perlstein, M. A., and Barnett, H. E.: Nature and Recognition of Cerebral Palsy in Infancy, J.A.M.A. 148:1389-1397, 1952.

TABLE 4

	Spastic		*Athetoid*		*Ataxic*		*Rigidity*		*Total*	
	Orig.	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*
1.	10	19	4	8	0	0	0	0	14	27
2.	9	18	4	10	0	1	0	0	13	29
3.	13	5	4	2	0	1	0	0	17	8
4.	7	3	6	5	1	0	1	4	15	12
5.	6	0	11	4	1	0	5	2	23	6
	45	45	29	29	2	2	6	6	82	82

The following table shows the results in the unimproved cases:

TABLE 5

	Spastic		*Athetoid*		*Ataxic*		*Rigidity*		*Total*	
	Orig.	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*	*Orig.*	*Pres.*
1.	1	1	0	0	0	0	0	0	1	1
2.	2	2	1	1	0	0	0	0	3	3
3.	2	2	0	0	0	1	0	0	2	3
4.	2	2	1	2	1	0	0	0	4	4
5.	5	5	9	8	1	1	16	16	31	30
	12	12	11	11	2	2	16	16	41	41

Sixty-four patients (52 per cent) showed varying degrees of mental deficiency. These included all but two of the unimproved cases. Again the spastic patients showed the least mental impairment, whereas those with rigidities showed the most.

TABLE 6

	Improved			*Unimproved*			*Total*	
	N	*B*	*D*	*N*	*B*	*D*	*N*	*D*
Spasticity	36	2	7	1	0	11	37	20
Athetosis	17	5	7	1	2	8	18	22
Ataxia	2	0	0	0	0	2	2	2
Rigidity	2	0	4	0	0	16	2	20
	57	7	18	2	2	37	59	64

N—normal, above 80
B—borderline, 70-80
D—deficient, below 70

Speech impairments were present in ninety-one of the 123 cases:

TABLE 7

	Improved	*Unimproved*	*Total*
Spasticity	19	10	29
Athetosis	25	11	36
Ataxia	2	2	4
Rigidity	6	16	22
	52	39	91

One quarter of the patients gave a history of one or more convulsions:

TABLE 8

	Improved	*Unimproved*	*Total*
Spasticity	5	7	12
Athetosis	6	4	10
Ataxia	0	0	0
Rigidity	3	8	11
	14	19	33

Large amounts of special equipment were prescribed for the patients. These included standing tables, special chairs, parallel bars, wheel chairs, skis, stabilizers and other equipment. The eighty-two improved cases accounted for forty-six such pieces, the forty-one unimproved for fifty-four pieces. One hundred eight braces, ranging from short leg to complete control were prescribed. In addition the noncerebral palsy cases received ten pieces of special equipment and two sets of braces.

TABLE 9

	Equipment			*Braces*		
	I	*U*	*T*	*I*	*U*	*T*
Spasticity	7	5	12	53	8	61
Athetosis	26	16	42	21	10	31
Ataxia	0	1	1	1	0	1
Rigidity	13	32	45	5	10	15
	46	54	100	80	28	108
Other			10			8

I—improved
U—unimproved
T—total

It is our impression that glutamic acid and the antispasmodic drugs are of no benefit in the treatment of cerebral palsy.

TABLE 10

	Glutamic Acid			*Antispasmodic Drugs*		
	I	*U*	*T*	*I*	*U*	*T*
Spasticity	3	3	6	0	1	1
Athetosis	1	0	1	10	4	14
Ataxia	0	2	2	0	0	0
Rigidity	0	1	1	0	3	3
	4	6	10	10	8	18
Other			8			1

Forty-seven cerebral palsy cases were dropped from the Cerebral Palsy Clinic, including all the unimproved cases with five exceptions in whom it was felt that there could be some improvement if the social situation could be altered. A few of the miscellaneous cases were continued for speech or some other special reason.

TABLE 11

	Improved	*Unimproved*	*Total*
Spasticity	7	10	17
Athetosis	4	8	12
Ataxia	0	2	2
Rigidity	0	16	16
	11	36	47
Other			16
Total discontinued			63

Reasons for discontinuance follow:

TABLE 12

Improved		*Unimproved*	
Overage	3	Poor cooperation	1
Maximum	7	Mental and Physical	34
Emotional	1	Left Missouri	1
	11		36

The spastic cases fell into the following categories:

TABLE 13

	Improved	*Unimproved*	*Total*
Quadriplegia	7	5	12
Paraplegia	15	2	17
Left hemiplegia	6	3	9
Right hemiplegia	17	2	19
	45	12	57

Quadriplegia seems to offer the poorest prognosis in this group, whereas the paraplegic patients have a good chance.

Thirty-seven surgical procedures were done on this group of patients:

TABLE 14

	Spastic	*Athetosis*	*Rigidity*	*Total*
Gastrocnemius recession	9	2		11
Heel cord lengthening	6	2	1	9
Adductor tenotomy	3		1	4
Stoffel procedure	2			2
Triple arthrodesis	4			4
Quadriceps transplant	1			1
Hamstring tenotomy	3			3
Ant. Tibial transplant	1			1
Pronator release	1			1
Obturator neurectomy			1	1
	30	4	3	37

Six years ago it was not uncommon to see in the clinic cerebral palsied children with severe deformities and malnutrition. Today such problems are rarely seen. Two thirds of the patients who have been evaluated have shown definite benefit or potential benefit from the program, whereas one third have remained as hopeless cases. Although 52 per cent are mentally retarded, training is still beneficial by reducing the burden to the parents, or, if institutionalization is necessary, by reducing the amount of nursing care required by the patient.

The cost of the program has been increased by prescription of a disproportionate amount of special equipment for patients who cannot benefit. In order to prevent this, each patient must be carefully evaluated from orthopedic and pediatric standpoints, and should have psychometric, speech, physical therapy and social service evaluations and other tests as indicated. In many instances a three to six month trial period is necessary before drawing final conclusion as to feasibility.

The major factor in determining poor prognosis appears to be severe brain damage resulting in a combination of severe physical disability and marked mental deficiency. In only two cases was physical disability alone so severe as to render the patient unable to benefit from training.

The training program has been far from ideal because the distances involved made frequent visits to the clinic impractical if not impossible. Moreover, social conditions frequently prevent optimum home care for the patient. Many of the patients would make more rapid progress if supervision could be on weekly or semimonthly basis, including physical, occupational and speech therapy as indicated. However, the burden of care and training must be on the parents because of the long term problem.

There has been one other major problem. Institutionalization was definitely advised in twenty-seven cases, either because of the physical burden or the mental problem. However, there is a three year waiting period for the two state institutions, nor is there any facility for children under the age of 5 years. There are no provisions for training for the severely physically handicapped children in these institutions to prevent deformities or to lessen the disability.

Since July 1951, seventy-five new patients have been seen in the Cerebral Palsy Clinic, of whom fifty-five have been diagnosed as cerebral palsy. Each new patient is evaluated as outlined previously, and problem cases are reviewed by an evaluation board consisting of physicians from various specialties.

SUMMARY

1. One hundred forty-five patients have been reevaluated, of whom 123 were diagnosed as cerebral palsy.
2. Eighty-two patients showed improvement, forty-one were unimproved.
3. Fifty-two per cent showed mental retardation.
4. Prognosis is best for spastic, poorest for patients with rigidities.
5. Each patient must be carefully evaluated and screened, and may require a trial period of training.

4161 Lindell Blvd.

Memory Is Short

. . . It's true that medicine has made astounding advances in just these recent years. A new generation has grown up that doesn't know the older days . . . and even some who do . . . forget. They think that "a shot of penicillin" or some other antibiotic can stop practically any infection . . . cure almost any disease. Comforted by this false information, they become careless . . . neglect their ills . . . pass them off as "just a cold" or "a touch of indigestion." And Death waits for just such neglect . . . waits for you if you choose to gamble. Be alert . . . be informed . . . but don't diagnose your own ills. It'll pay real dividends in a life . . . of health and happiness!—Caroline Ellis, "Of Health and Happiness," KMBC, Kansas City.

Whose Patient?

Difficulty frequently arises too over who actually is the physician for a given patient. Patients go from one M.D. to another much as groceries are bought wherever the mood happens to strike and consequently treating a patient last week does not necessarily give a doctor priority rights on this week's illness.—Dave Seabaugh, M.D., *Cape Girardeau Medical Bulletin.*

Case Report

Pheochromocytoma

R. C. SCHAFFER, M.D., AND A. W. ROBINSON, M.D., *Kansas City*

PHEOCHROMOCYTOMA is a rare enough entity to warrant the recording of an additional case. The adrenal medullary tumor in this report was complicated by a dissecting aortic aneurysm with rupture of the thoracic aorta and hemorrhage into the mediastinum and neck.

CASE REPORT

A 45 year old male was admitted to St. Luke's Hospital on March 3, 1952, with the complaints of severe left hemicranial headaches, substernal tightness and weakness of both lower extremities of approximately six hours duration.

For the last ten years he had noted frequent hemicranial headaches, primarily left sided. These were characterized by sudden onset, unilateral lacrimation and flushing of the face and were often nocturnal in occurrence. The attacks were usually twenty to forty minutes in duration. (The description of these headaches was thought fairly typical for histamine cephalalgia).

Because of these headaches, he first consulted a physician in 1946. He was found to be hypertensive and follow-up checks were reported to show a blood pressure varying between 230/130 and 150/80 mm. Hg. However, he was able to continue his work quite successfully as manager of a frozen food locker. No familial history of hypertension or record of prior kidney disease could be elicited.

For the last year he had experienced episodes of sudden nervousness, tremulousness, weakness, substernal tightness, sweating and pallor which occurred as often as once or twice weekly and usually lasted from fifteen to twenty minutes. Headaches were not a prominent feature and he could not recall palpitation, nausea, dyspnea or dizziness during an attack. Owing to the brevity of these attacks, his blood pressure had never been recorded during the time his symptoms were most prominent. He was unaware of any definite precipitating factors.

On the morning of March 3, 1952, the patient was straining while working with a heavy wrench, when he suddenly developed a severe pain in the left hemicranium and thought he would faint. This was followed immediately by substernal tightness, dyspnea and extreme weakness in both lower extremities. The latter was more evident in the left leg with paresthesias throughout this extremity. His physician administered aminophylline intravenously and morphine hypodermically and rushed him into the hospital.

Physical examination revealed a well developed, well nourished, prostrate 45 year old white male, exhibiting a tense, anxious facies, hyperhidrosis, pallor and moderate dyspnea. The blood pressure was recorded as 240/140 and the pulse 104. Fundoscopic examination of the retinal arterioles showed narrowing, grade 2, focal constrictions, grade 2, and arteriolosclerosis, grade 2 (where 1 is the mildest and 4 the most severe degree). Motor weakness of both legs was evident, much more pronounced on the left. Otherwise complete physical and neurologic examination was normal. The heart was not enlarged to percussion and the cardiac sounds were of fair quality. The lungs were clear to auscultation and percussion. No tenderness or masses were palpable in the abdomen. Good femoral pulsations were present bilaterally.

Laboratory studies showed the following: hemoglobin, 92 per cent, red blood cells 4,620,000 cells per cubic mm.; white blood cells 19,000 cells per cubic mm., neutrophils 92, lymphocytes 4, monocytes 4; urinalysis showed specific gravity 1.012, albumin 2 plus, sugar negative, acetone positive, many red blood cells; sedimentation rate 2 mm. per 1 hr. (Wintrobe); Mazzini negative; nonprotein nitrogen 50; fasting blood sugar 123; blood cholesterol 228. The electrocardiogram showed a left ventricular strain pattern. On March 10 hemoglobin was 88 per cent; red blood cells 4,440,000 per cubic mm.; white blood cells 29,400, neutrophils 90, lymphocytes 6, monocytes 4. No roentgenograms or further studies were carried out because of the patient's critical condition.

He was started on a course of sedation and veratrone vasodilatation. His blood pressure continued to be extremely variable ranging between 140/80 and 240/140 mm. Hg. By the second hospital day he was able to move his lower extremities with greater facility and take some nourishment. However, throughout his hospital course he complained of recurrent tightness in the chest, extreme weakness, nervousness and dyspnea.

On March 10, 1952, at 8:00 a.m. he became acutely dyspneic and went into shock. This was accompanied by a tender swelling of the neck bilaterally showing a diffuse pulsation. His blood pressure was recorded at 120/80 and his pulse 100, being weak and thready. He did not respond to oxygen and other supportive therapy. At approximately 11:00 p.m. of the same day he developed sudden excruciating pain in the substernal and left apical chest areas without arm radiation. He became cyanotic and lapsed into a coma soon afterward. One half hour before his death his blood pressure was recorded as 180/120 and pulse 124. He died at 5:50 a.m. March 14, 1952.

NECROPSY FINDINGS

The mediastinum was distended and engorged with clotted blood (fig. 1), which extended into the neck and accounted for the gross swelling there. Clotted blood surrounded all the great vessels of the neck and mediastinum, the latter being converted into a firm purple mass.

On opening the aorta, it was seen to be involved with severe atherosclerosis throughout including the ascending and transverse portions. In the posterior wall of the distal portion of the arch, there was a 3 mm. perforation through an atheromatous plaque (fig. 1). The perforation extended through the entire

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From the Departments of Medicine and Pathology, St. Luke's Hospital, Kansas City, Missouri.

thickness of the wall and accounted for the hemorrhage into the mediastinum and neck. At this point also, a dissection of the medial layer of the wall extended proximally for a few centimeters and distally down the entire length of the aorta and out many of its branches, including the iliac, renal and superior mesenteric arteries.

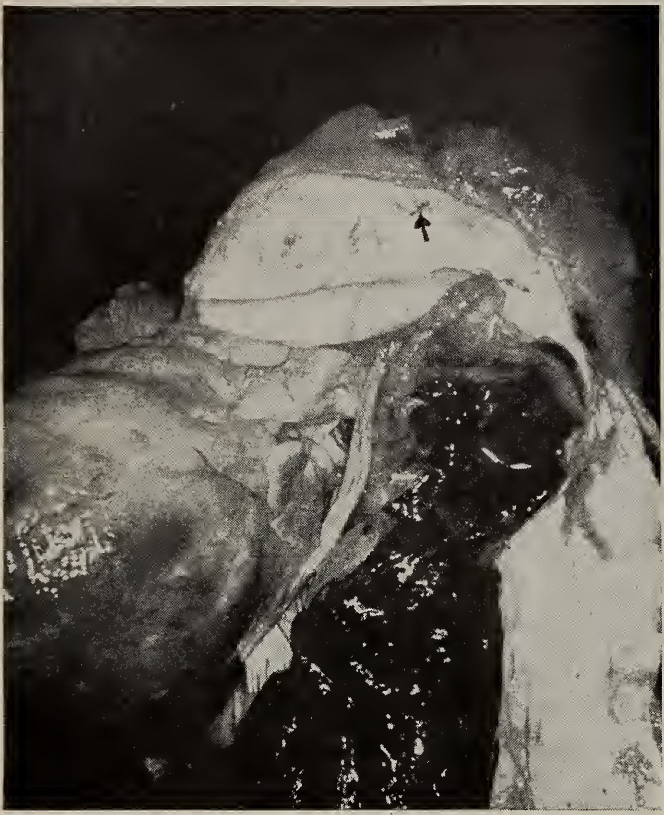

Fig. 1. The heart is to the left and the aorta to the right. The extensive hemorrhagic clot in the mediastinum and in the wall of the aorta is seen in the central portion. The arrow indicates the point of rupture of the aorta and the point at which the dissection started.

The right adrenal gland was normal in appearance. The left adrenal gland had a 2 centimeter nodule (fig. 2) in the hilus and on section the tumor nodule was seen to be well defined from the surrounding gland, but had no definite gross capsule. It was uniform pink-tan in color and slightly firm in consistency. The cortices of both adrenals were spotty yellow; the medullae were narrow and gray-tan.

The heart weighed 420 grams and was concentrically hypertrophied. The kidneys weighed 180 grams each. Their capsules stripped easily leaving fairly smooth cortical surfaces. Cross section of the right kidney revealed two 10 mm. areas of infarction in the upper pole. The dissecting aneurysm of the aorta extended out the right renal artery for a distance of 2.5 cm. and the artery's lumen was partially filled with thrombus.

The stomach had a 4 cm. hematoma in the wall at the cardia which appeared to be an extension of the mediastinal hemorrhage. The lungs, liver, spleen and pancreas showed nothing remarkable.

HISTOLOGY

The important histologic findings were as follows:

Aorta.— There were large areas of myxoid degeneration in the media and extensive atheromatous degeneration of the intima. The media was separated into two layers by a large amount of thrombus and blood clot. Many of the smooth muscle fibers of the media were fibrillary, granular and separated by light staining spaces filled with fibrillary material.

Adrenals.—The usual architecture was present except for the tumor in the medullary portion of the left adrenal gland. When treated with Orth's fluid the tumor cells showed definite chromation. With an H & E preparation (fig. 3), these cells were deeply basophilic. They were large and quite variable in shape, being polygonal, rectangular and oval. Some nuclei were deformed and hyperchromatic. A close morphologic resemblance existed between the normal medullary cells and the tumor cells. The cells in the tumor were arranged in irregular columns and cords with intervening vascular spaces. Some small nerve trunks and nerve cells were encountered. There were patches of cells in the tumor which showed granular degeneration and the intercellular spaces in these areas were invaded by a moderate number of polymorphonuclears and lymphocytes, suggesting partial infarction.

Heart.—The myocardial fibers were rather markedly hypertrophied. There was considerable brown pigment deposition adjacent to the nuclei.

Kidneys.—There was cloudy swelling of the convoluted tubules. A few glomeruli were hyalinized and showed associated tubular atrophy and round cell infiltration adjacent to them. There was moderately severe arteriolosclerosis.

Final diagnoses were: Pheochromocytoma of the left adrenal gland; dissecting aneurysm of the aorta with perforation of the arch of the aorta and hemorrhage into the mediastinum, neck and mesentery; two ischemic infarcts of the right kidney; concentric hypertrophy of the heart; mild arteriolar nephrosclerosis; severe ulcerative atherosclerosis of the aorta; submucosal hemorrhage in the stomach with hematoma formation.

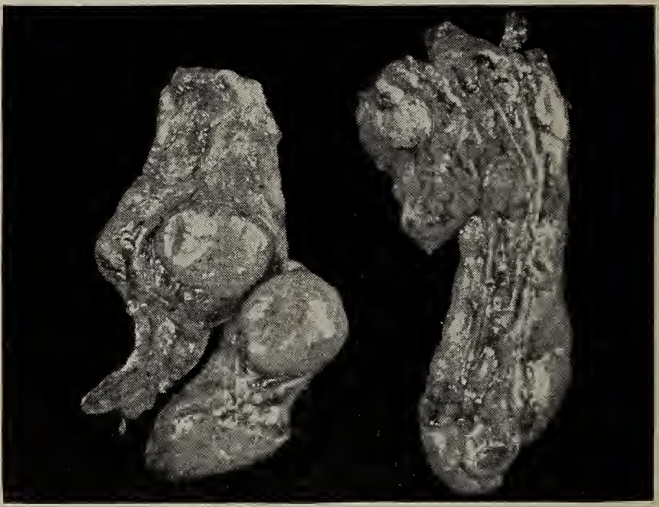

Fig. 2. The specimen to the left is a cross section of the left adrenal showing the 2 cm. tumor in the hilum. The specimen to the right shows the normal right adrenal gland.

DISCUSSION

Graham[1] in an exhaustive analysis of 209 cases of pheochromocytoma in the literature estimated the incidence of hypertension due to this neoplasm to be approximately 0.5 per cent. If this figure is fairly accurate, then, considering the staggering number of patients who succumb annually from hypertension, it is conceivable that a significant number of these patients die from pheochromocytoma. In all probability a large percentage of pheochromocytomas go unrecognized. This is a distressing realization since pheochromocytoma can be diagnosed with present pharmacologic testing methods and can, in many cases, be cured with surgery. Deaths due to pheochromocytoma in most instances are avoidable. Therefore it behooves one to maintain a high index of suspicion when seeing all patients with hypertension.

The patient in this case gave a fairly good history of paroxysmal hypertension. The symptoms of headache, sweating, weakness, pallor, substernal pain and nervousness are those that might be expected with sudden outpouring of epinephrine or nor-epinephrine into the blood stream. The elevation of the fasting blood sugar to 123 mg. per cent also is consistent with the clinical picture of pheochromocytoma since hyperglycemia and glycosuria are commonly found in this disease entity. Epinephrine released from the tumor apparently directly enhances the conversion of liver glycogen to glucose.[2] Also epinephrine is thought to activate the ACTH-adrenal cortical cycle with the liberation of corticosteroids which accelerate the process of gluconeogenesis.[3]

We have been able to find in the literature only one other case of pheochromocytoma with death resulting from a dissecting aneurysm of the aorta.[4] Since dissecting aortic aneurysm occasionally is seen as the cause of death in patients with hypertension, undoubtedly more cases will be reported in the future.

It is of interest to note that at the time the patient went into shock, fifteen hours before he experienced any chest pain, he developed a bilateral pulsative swelling of the neck. This swelling undoubtedly was due to rupture of the aortic arch and hemorrhage into the upper mediastinum and neck as found at postmortem. Whether the dissection of his aorta occurred at the same time or fifteen hours later when the patient experienced the severe pain, poses a problem. Almost invariably dissecting aneurysm is associated with excruciating pain from the inception of the dissecting process. Dissection in this case may have occurred at the same time as the rupture and the absence of pain may possibly be explained by coexistent shock and its associated dulling of the sensorium. Or possibly the rupture occurred at first without the dissection and the degenerate area of the aortic rupture was insensitive to pain. The degenerate area then allowed the dissection to occur fifteen hours later at the time the excruciating pain became apparent. In any case the dramatic event of a sudden bilateral, tender, pulsatile swelling of the neck should suggest rupture of the thoracic aorta or one of its major branches with hemorrhage into the mediastinum and neck.

SUMMARY

A case of pheochromocytoma with a history of paroxysmal hypertension and death from rupture of the thoracic aorta with dissecting aneurysm is reported with necropsy findings.

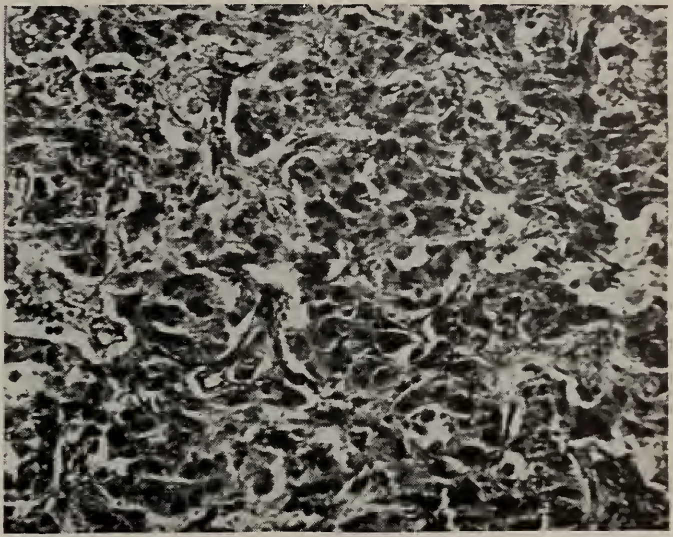

Fig. 3. A photomicrograph of the tumor of the left adrenal showing the polygonal tumor cells with chromated cytoplasmic granules (X 350).

The clinical finding of a sudden bilateral pulsatile swelling of the neck as seen in this case is a physical sign indicating rupture of the thoracic aorta or one of its major branches with hemorrhage into the mediastinum and neck.

4635 Wyandotte St.

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BOOK REVIEW

SEX AFTER FORTY, by S. A. Lewin, M.D., and John Gilmore, Ph.D. Introduction by the Reverend Dr. Russell L. Dicks, Professor of Pastoral Care, Duke University. Published by Medical Research Press. Distributed by Grosset & Dunlap. 1952. Price $3.50.

This volume written by the authors of "Sex Without Fear" discusses sex after 40 in great detail. In the opinion of the reviewer much of the material is a résumé of the former volume, and is put in this one to make it sufficiently long to make a book. Most of the facts contained in it should be known long before an individual reaches the fortieth birthday. It is written in popular rather than scientific style and has little to recommend it. M. E. M.

Among the Potent Hypotensives

NOTEWORTHY FOR ITS SAFETY

Veriloid, a selective alkaloidal extract of Veratrum viride (the alkavervir fraction, representing less than one per cent of the whole root) presents these noteworthy features when a potent hypotensive agent is needed.

- Biologic assay—based on actual blood pressure reduction in mammals—assures uniform potency and constant pharmacologic action.
- Blood pressure is lowered by centrally mediated action; there is no ganglionic or adrenergic blocking.
- Therapy is rarely, if ever, fraught with the danger of postural hypotension.
- Hypotensive action is independent of alterations in heart rate.
- Cardiac output is not reduced.
- Renal function, unless previously grossly reduced, is not compromised.
- Cerebral blood flow is not decreased.
- Cardiac work is not increased, tachycardia is not engendered.
- No dangerous toxic effects from oral administration, no deaths attributable to Veriloid have ever been reported. Side actions of sialorrhea, substernal burning, bradycardia, nausea, and vomiting (due to overdosage) are readily overcome and thereafter avoided by dosage adjustment.
- In broad use over five years, literally in hundreds of thousands of patients, no other sequelae have been reported, whether Veriloid is given orally or parenterally.
- Tolerance or idiosyncrasy rarely develops; allergic reactions have not been encountered. Hence tablets Veriloid can be given for the long course of treatment required in severe hypertension.
- Continuing therapy with Veriloid has not led to interference with appetite or with excretory function.
- Because of its rapidly induced, prolonged action (6 to 8 hours), tablets Veriloid provide around the clock hypotensive effect from 4 doses daily, make today's dosage effective today, and usually prevent hypertensive "spiking" during the night.
- A notable safety factor in intravenous administration is: *the extent to which blood pressure is lowered is directly within the control of the physician.*

An Original Riker Research Product

Special Articles

The Joy of Gathering Medical Treasures

HOWARD DITTRICK, M.D., *Cleveland, Ohio*

MEDICAL LIBRARIES, and physicians as well, often are troubled over the disposal of historic objects that come into their possession. This paper affords one answer and tells the story of the accumulations in one institution into an internationally recognized museum. Those responsible for this development have been a physician and his wife, other physicians and their families, together with friendly museums here and abroad.

Desirable objects were sought assiduously among the effects of deceased physicians and the stocks of dealers in antiques. When appropriate items were discovered, a friend of the Museum was invited to act as angel and, when such objects were purchased, they were recorded as gifts of this sponsor. Duplicate material has been presented, but with any sizeable donation there is usually a worth-while specimen. Although the Museum has now reached the stage of selection in acquisitions, the advice of Sir Arthur Keith, Director of the Museum of the Royal College of Surgeons, has been consistently followed—never to treat any donated historic material as junk. In passing, it should be noted that until the last year, all services for the Museum have been voluntary; part time clerical assistance has recently been provided.

The origin of our Museum lay in a small packing box of old instruments that Dr. D. P. Allen had deposited in the Library, from the effects of his father and grandfather. When the Library, in 1926, moved into its new home on the University campus, this material was turned over to me with instruction to determine its future disposition. This marked the birth of a museum.

A wealth of pharmacy material has come from local and foreign sources. Attractive shelving of walnut and San Domingo mahogany came from a pharmacy in the Polish section of Cleveland, thriving in the seventies, and was presented by a local druggist. Handsome hand-blown glass bottles with black letters on a gold background, belonged to the Smithnight Pharmacy in the Civil War period. The blue ointment pots, imported from Germany in 1880, had been in the Petersilge Pharmacy until it became submerged in an inundating slum area. Near the pots is an early American leech jar of white porcelain, urn shaped with perforated lid, bearing the legend "Leeches" in black letters. For ten years I attempted to purchase the leech jar, but not until the druggist's death were friends able to acquire it for the Museum.

The trail for Museum objects has led into many bypaths of travel. In Sarajevo, a pharmacist entertained us in the private quarters of his shop. We were served tiny cups of thick, syrupy Turkish coffee, and when his shop was closed he escorted us for a midnight stroll around the ancient Moslem city. It was a different city, with its hundred needles of minarets, its softly splashing fountains for ritual washing before prayer, its shadowy inn for caravans of men and beasts, its coffee shops where on long spits chickens, lambs, or even a whole sheep roasted before glowing charcoal. We did not sample the roasting meats, but we did taste the national plum brandy, slivovitz.

Sarajevo, the place of caravans, derives its name from the traffic from India, along the Spice Road of Arabia, up through the Balkans to the dealers of Western Europe. Drugs were sold along the way in market booths, such as we saw in Sarajevo's Turkish Bazaar. In one booth, a Jewish family exiled from Spain, sold crude drugs and dyes, basing their knowledge of drugs upon the accumulated folklore handed down from father to son. We had little common language but I succeeded in acquainting the owner of the booth of our Museum activity and in acquiring a rounded, oblong, thin wood container from his shelves. Within it he generously placed a dried pomegranate, a bit of gentian root and a portion of resin. The resin had for container a piece of green bark, folded to form a crude pocket, with the sides held fast by two twigs.

A Vienese apotheke was located near the votive column erected in gratitude for relief of the city from plague. In World War I the Germans had taken his beautiful bronze mortars to make into cannon. His shelves displayed wood jars, in natural finish, and one of these he presented to us. The Latin label indicated that it had been used for powdered Baptist stone, powered amethyst. Its place in our Museum is beside a Delft jar for lapis lazuli. In the Middle Ages semiprecious stones were reputed to have medicinal values.

We were able to acquire a number of majolica drug jars in Madrid, as well as some of Spanish blown glass. Two cobalt blue, half gallon, glass jars, part of a group that was shipped to Antwerp, were also purchased. An obliging Madrid druggist presented us with a bit of theriac, a marvelous antidote to poisons, and medieval cure-all, which had been compounded in 1859, and was still pliable.

Along the Dalmatian coast we visited Dubrovnik (old Ragusa). Two pharmacies entranced us. The proprietor of one (Apotheke Domus Christi,

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Director, Howard Dittrick Museum of Historical Medicine, Cleveland, Ohio.

founded 1420) showed us his prized jars, and an inventory of the store taken by Napoleon's troops in 1811. Across the Esplanade was a second pharmacy within the cloisters of a Franciscan monastery. A tonsured monk in brown robe and barefoot sandals proudly displayed his rare jars. This pharmacy of the Little Brothers was founded in 1317. Prescriptions filled in both shops form part of our pharmacy collection.

Some material has been acquired with little effort. One such gift came in response to a letter to Justice Holmes. It was pointed out that because of his father's part in the discovery of the contagiousness of puerperal fever some object associated with him was desired for the Museum. Promptly he sent Oliver Wendell Holmes' lignum vitae twine box with its original ball of red twine. Justice Holmes' card was within and it read, "This twine box is presented to the Cleveland Medical Library. It has stood on what was my father's desk from his death until now."

Another valuable display came almost entirely from the effort of F. A. Whiting, former Director of the Cleveland Museum of Art. He learned of the sale by auction of eight pieces of surgical appliances made by sixteenth century Austrian armorers. At that time the Museum had no budget. At his suggestion I telephoned a Cleveland orthopedic surgeon, and was thrilled with his response, "Sure, I will give you $500.00." With that evidence of medical interest, Mr. Whiting proceeded to bid in the articles, obtaining an additional $500.00 from another benefactor.

Mr. Whiting also provided me with credentials which facilitated purchase of Greek votives (400 B.C.) from the Metropolitan Museum of Art, and replicas of marbles of medical interest from the British Museum and other institutions. A letter to a curator in Rome led to the acquisition of reproductions of the bronze surgical instruments from the House of the Surgeon overwhelmed at Pompeii in 79 A.D. Originals are now in the Naples Museum.

Another class of objects that has been acquired at slight expense is photographs. The galleries here and abroad abound with examples of disease depicted in art. Attendants looked at us quizzically and then became cooperative when we asked for photographs showing insanity, deformities, spectacles, blindness, plague, skin disease, circumcision or childbirth.

The Wellcome Historical Medical Museum in London is the largest of its kind in the world. We spent a week with the Conservator studying the displays. Subsequently he sent us a model of the first stethoscope devised by Laennec. Recently we have been fortunate in acquiring an original specimen.

In the Wellcome Museum we saw replicas of the first obstetric forceps, attributed to Dr. Peter Chamberlen of London in the seventeenth century. The invention was kept secret, but many years later they were discovered during repairs to the Chamberlen house. We had seen the originals in the Royal Society of Medicine. The following January we wrote to the Society asking for permission to have reproductions made. In June the Secretary replied that the Council of the Society had met and had granted our request. He added that a member of the Council, Sir Henry S. Wellcome, had graciously undertaken the project and would forward them as his personal gift. They may be seen in the same case as the reproduction of William Smellie's wooden forceps from the Royal College of Surgeons.

Other quests proved more elusive and thus the more alluring. In the State Museum at Harrisburg, Pa., a small tin can with a spout was labelled "Nursing Can," and was used in baby feeding. For several years we searched diligently but unsuccessfully for one of these devices. We were finally able to acquire two in York, Pa. There are now nine in the collections. Nursing cans were used only by the Pennsylvania Germans. Influenced by knowledge of the English bubby pot and the use of tin in Cornwall and Devon, the mothers of southeast Pennsylvania had these cans made by the travelling tinkers. The nursing can is American.

We had a similar long hunt for a castor oil spoon. These are oval shaped, with a hinged cover for filling, a slit opening at the tip, and a hollow handle. The tip of the spoon is inserted into the baby's mouth. The mother blows down the handle; a slip, slop and a gobble and down goes the castor oil. The acquisition of one of these spoons required much patience. We could not find any in the shops in England, and were told that they existed only in museums. On a trip to Toronto we saw five in the pediatric collection of Dr. T. G. H. Drake, one of which he graciously permitted us to purchase. In a group of donated instruments we discovered a black spoon, which when cleaned proved to be a castor oil spoon of old English silver plate.

Another difficult search began at a meeting in Kansas City where Logan Clendenning proudly exhibited an ivory nude figure of a Chinese lady. Physical examination of a woman is taboo in China. A woman in pain sends a nude figure to her physician by messenger, who indicates on it the location of the pain. The physician sends appropriate remedies by the messenger. After a long wait two modern figures were found in Oriental shops and several others have been donated or loaned to the Museum.

We had never known of hollow glass breast protectors to be used for lactating mothers until Dr. E. A. Hashinger showed us a pair in the Kansas City Medical Center. About two years later a similar pair was presented to our Museum.

In the National Museum at Mexico City we saw two figures showing Pott's disease, one of Aztec, and the other of Zapotec culture. The Director examined my credentials and graciously ordered replicas for our Museum. One figure was of stone and the other of terra cotta. When I returned for the copies, I was amazed by two things, their close resemblance to the original and the unfavorable impression of the artist. He was a half pint, crooked little gnome with one blind eye and apparently about half vision in the other. In spite of his handicaps, his work was so excellent that we have never ceased to admire his craftmanship.

Another experience is a long story which must be rigidly curtailed. San Rocco of Provence in gratitude for his recovery from bubonic plague became a hermit and was attended by an angel and a dog which brought him bread. Wherever he went the plague disappeared. After his death he was venerated as a plague saint. We saw many statues of him in France, Italy and Spain. In Cavtat on the Dalmatian coast, the Racic family, almost wiped out in the influenza epidemic, had a mausoleum executed by Mestrovic depicting San Rocco and his dog. The statues seemed to be everywhere, but none could be procured.

On a subsequent round of exploration of the shops on Third Avenue in New York, we were especially fatigued and discouraged. In the last shop, the owner suggested that we might find something of interest in his storage building. It was dark, dusty and dingy, until in one corner we espied a polychrome stone statue of San Rocco with his staff, his angel, his dog bringing bread. As always he was shown raising his tunic to exhibit the characteristic bubo. The price was unimportant. San Rocco now presides over our Museum.

Many colorful and surprising incidents have occurred in the twenty-seven years quest of the historic medicana, but the editor has warned aut brevis, aut scissors and I shall relate only a final amusing incident. We visited the Rag Fair at Rome and picked up two volumes of Galen brown with age and channeled by the erudite bookworm. We lingered at a stand to admire an altar cloth. The price was high and the saleswoman insistent. We protested that our boys at home would not be interested. "How large a family?" she asked. "Six boys," my wife replied. Immediately the Senora Italiana countered by exposing her breast and copiously annointing my astonished wife with a stream of lacteal fluid. We were told that this was an old Italian blessing for fertility.

These are some recollections of amusement, pleasure, thrills and satisfaction that have come in gathering together material which it is hoped will be of historic value for years to come. For some anxious souls, a safe haven has been provided for their medical treasures. An institution has been organized where a study of the medical past can perhaps point the way to future progress.

A Great Service to American Physicians

THOMAS L. DWYER, M.D., *Mexico*

EACH GENERATION of free men holds its freedom in trust for posterity. In this generation our medical men and women have been faced with a supreme test. St. Luke, physician and Patron Saint of physicians stated the principle that "A laborer is worthy of his hire." However, history has recorded the failures arising from its rejection.

Repudiation of this basic precept is the heart of Socialism and the aim of all plans which attempt to divorce "worth" from "hire," and would substitute rights for responsibility, efficiency and initiative.

The American medical profession was not made the efficient instrument for the service of mankind that it is by any one outstanding character or group of characters, no particular chance genius at any one time or era nor any later totalitarian state developed such a highly etical body of citizens. Such a record as unifies the medical profession came only through the freedom of the minds of all where human beings voluntarily subjected themselves to a profession to serve mankind. From the "grass-roots" and humble stations scattered throughout our great nation to the exaulted pinnacles of success in great cities do men serve with a single purpose to the best of their ability to assure health and length of life to everybody.

It is the purpose of the Association of American Physicians and Surgeons to meet the problems of medicine relating to the legislative proposals and economic changes that are proposed and to deal with them efficiently. The Association is dedicated to stand guard for the liberties and freedom of the medical profession, to take action against politically controlled tax supported plans by whatever name and to keep the profession alerted to the ever growing creeping infringements of those who would divide and conquer.

The Association of American Physicians and Surgeons was conceived by a small group of "grass-roots" doctors in Indiana more than ten years ago who became concerned for the divergence from principle which was showing itself nationally and more concernedly toward the medical profession with the propaganda of federalized medicine. They felt the busy doctor would be entrenched in the collectivist ideology before he was aware of what was happening. So they, with the approval of other established medical groups, began their job to ferret out any activity or plan

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Member, National Board of Directors, Association of American Physicians and Surgeons.

which would deviate from high ethical medical standards, or tend to destroy the patient-doctor relationship, and to meet the unexpected threat to our professional integrity as it presented itself. In turn, they endeavor to keep the profession informed from day to day; to be cognizant of all aspects of medical economics and be prepared to deal with them.

The membership drives have continued year after year with gratifying response because the need for unified action or voice was felt and there was no other medical organization available to develop this politico-economic counterattack on ethical medicine. Neither were there funds available except through membership dues. The organization was incorporated, offices established in Chicago and an executive secretary and staff appointed. A steady well established growth has ensued which, with the steadfast interest and support of other qualifying organizations, is helping the medical profession to hold the line of free men, that Freedom may be held in trust for posterity.

To summarize briefly a couple of statements from the Code of Ethics of the Association leaves one in hearty accord: "Medical care can never be without cost to someone whether the individual or the state. Health, like happiness, is by nature personal and is primarily an interest of the individual as compared with mass health, which is an interest of society. Certain modes of providing medical service to the individual are inimical to the interest of the patient and the public. Professional medical services cannot be mass produced, must not be sold on a commission and finally no physician can be loyal at the same time to his patient and the state."

Neither the government nor any other force can impose socialized medicine on the people if the members propose to exercise their constitutional right not to participate in schemes which are contrary to the public interest. The plan of nonparticipation is not a proposed strike. A "strike" means a withdrawal of services and no AAPS member proposes or has contemplated a withdrawal of his services from his patients. Members will continue to serve their patients as private patients, but will refuse to serve them as servants of any government or lay controlled socialized medicine schemes. Such a stand is not only morally and ethically right—it is legally sound and in the American tradition.

Much of the Association's legislative success is due to its technic of first informing and then stimulating individual physicians (the grass-roots of medicine) to express their views directly to their Congressmen. Experience shows that when the views are in large numbers and in unanimity, Congressmen are persuaded. AAPS augments its more effective grass-roots legislative technic by filing statements with, and by having representatives testify before, congressional committees which consider legislation for socialized medicine and Socialism. Their work is tireless in ferreting out "fringe" socialistic legislation and exposing it for what it is.

In the field of public service the Association was the first medical organization to adopt and implement a program of Freedom education for all physicians and their fellow men.

The Freedom programs consist of a three pronged attack against Socialism. The ultimate objectives are to regain lost freedoms and perpetuate all of the traditional freedoms to the benefit of the American people. Wide and effective implementation of the Association's Freedom program will contribute largely to the success of preserving individual liberty and free market economy. Every business, every profession and every citizen will reap everlasting rewards from the success of these programs. The three programs in the battle against Socialism are: (1) The national Essay Contest for high school students on the subject: "Why the Private Practice of Medicine Furnishes This Country With the Finest Medical Care." (2) Each year providing the nation's more than 40,000 medical students, interns and residents with free copies of the Association's monthly News Letter and other selected Freedom literature. (3) Furnishing the opportunity to all physicians to understand the principles of human liberty by providing them with the best libertarian publications to stimulate the individual physician to wage the fight for Freedom through education of his fellow citizens.

The Association's Freedom programs are effectively and successfully meeting the enemy on these three vital fronts. Penetration of any one of the fronts might be the forerunner to a sweeping victory for Socialism. It is the aim of all members that this will not happen.

The programs are accomplishing the reeducation of the nation's youth to save these future young voters from Socialism; the preservation of the future of private, quality medical care through enlightened Freedom loving young doctors and the creation of a Freedom army of physicians and their patients to carry forward Freedom's torch to everlasting victory. In other words, we aim to build a powerful, ethical and educational force for Freedom.

There is not sufficient reason for relaxation of our vigilance in the threat of socialized medicine. Socialism still exists. Politicians are pretty much the same in that they will embrace policies to enhance their popular appeal to the voters. Other problems in the field of medical economics will appear which will have a potential danger for our profession.

We have just begun to fight. A great many problems still lie unfinished before us and we will continue to meet new problems as they arise. No longer can physicians merely practice medicine and go about their daily tasks without recognizing the relationship between themselves, their community and their economic environment. Increased membership would greatly enhance and expand the functions through the added financial help. However, all physicians will benefit through the programs of the Association with its effort to preserve Freedom for future time.

Pensions for Physicians

FRANK G. DICKINSON, Ph.D., *Chicago*

Physicians are naturally more interested in the Reed-Keogh bills (H. R. 10 and 11) than they are in President Eisenhower's proposal to force them under the Social Security Act.

The principle of these bipartisan bills was approved by candidate Eisenhower on October 24, 1952, and by many leaders of the Democratic party. These bills would give the tax deferment counterpart of the pension plans set up by corporations for the benefit of officers and employees to 11,000,000 self employed physicians and other professionals and farmers and to 32,000,000 employed persons whose employers have not set up pension plans.

The recent comments of President Eisenhower on other matters discussed during his successful campaign encouraged me to believe that eventually pension legislation of this sort will be supported by the White House. On the other hand, various professional groups will unquestionably continue their opposition to being forced under the Social Security Act, at least until it is substantially amended.

At present, between 80 and 90 per cent of the pensions now being paid under old age and survivors insurance are charity, or gratuities from Uncle Sam, if you will. The President's advisors, as well as other leaders in Washington, seem hell bent for election to raise this percentage up to 95 per cent so that only a thin layer will remain between the Social Security Act and the Townsend plan. The latter, of course, would provide gratuities for which no special tax had been paid by the recipient before he retired.

I do not share the sidely held view that the New Deal and the Fair Deal destroyed Liberalism forever. I am, however, among those who are concerned with the attempts of certain Liberals among the President's advisors who would convert Social Security pensions to something close to Townsendism. I would include in that grouping a good many of those who advocate a pay-as-you-go scheme.

Three essential reforms are needed before there is any excuse for bringing physicians under the Social Security Act. These three are:

1. Jump the tax rate for employees over 50 years of age from 2 per cent (after January 1) to 6 per cent of salary up to $3,600 a year. Jump the tax from 2 to 4 per cent on those between 35 and 50 years of age, and leave the rate unchanged at 2 per cent for employees under 35 years of age. The employer's tax rate would also be increased enough to preserve the 50-50 basis of contributions but would be the same regardless of the age of a particular employee. These sharp increases are necessary if employees, along with their empolyers, are to contribute the full costs of their OASI pensions before they retire.

2. Eliminate the "work rule" which prevents a person from drawing his Social Security pension between age 65 and 75 if he earns more than $75.00 a month. In 1951 half of the self-employed physicians retiring did so after their 74th birthday. Under the present "work rule" they would be required to pay taxes but would receive no pension until reaching age 74, that is, those who live that long.

3. The extra income derived from these increased OASI taxes should be used to buy government bonds in the open market and these bonds should be canceled forever by the Treasurey Department the day they are purchased. (Perhaps a small "petty cash fund" might be advisable.) The 18 billion dollars of government bonds at present in the OASI trust fund should be similarly canceled forever. More than $5 billion of the government debt could thus be retired annually.

If these three reforms were accomplished, a retired person could then accept his OASI pension starting promptly at age 65 with the knowledge that he was not robbing younger taxpayers, that he had prepaid a good share of the cost of his own pension. Most of his OASI taxes would have been used to retire the national debt. And the national debt is a real burden for the younger taxpayers.

Now for the $64.00 question: Would physicians be willing to come under the Social Security Act after these three basic reforms? I doubt it, if the plan were compulsory. But I am not speaking for the American Medical Association. These views are my own, similar to those which I expressed during my twenty-five years of teaching economics at the University of Illinois before I became the economist of the American Medical Association in September 1946.

Economist and Statistician, American Medical Association. Delivered at a dinner meeting of the Jackson County Medical Society on October 27, 1953, Hotel President, Kansas City.

℞: Common Sense

Gastrointestinal Antispasmodics

Jesse D. Rising, M.D.

A day in the office isn't complete without a visit with a detail man about a new antispasmodic. The demand for these drugs is enormous, offering testimony of the impact of our civilization on our collective digestive systems. The multiplicity of names of (and claims for) drugs in this group can cause considerable confusion which in turn leads to sloppy therapeutics.

The chief gastrointestinal antispasmodics belong to the atropine group of parasympathetic blocking agents. Since no one is completely satisfied with atropine, an intensive and expensive search has been conducted by pharmaceutical manufacturers for many years; the current flood of antispasmodics is the result. Before we examine the newer agents, it might be well to consider what we can expect of belladonna or atropine.

Atropine in the usual dosage (10 minims of tincture of belladonna yields 0.18 mg. or 1/400 of a grain of atropine) can be expected to relieve hyperperistalsis (pain), reverse peristalsis (nausea), pylorospasm and reflex spasticity of the colon. Note that these are all motor effects; there are antisecretory effects of atropine, but excessive dosage is required to accomplish them and side effects are numerous. Furthermore, there is some evidence to suggest that when secretions are suppressed the protective gastric mucin is decreased more rapidly than hydrochloric acid resulting in aggravation of gastritis or peptic ulcer.

Besides atropine there are other alkaloids which are mentioned frequently in proprietary preparations; for example, hyoscyamine. The chief thing to remember about hyoscyamine is that racemic hyoscyamine is a synonym for atropine. Levo-hyoscyamine is the part of atropine that is responsible for virtually all of its effects, both therapeutic and toxic; it is twice as potent and twice as toxic as atropine, to state the matter simply. Remember that the next time a detail man points out the advantage of his product (which contains hyoscyamine) over atropine. Remember and smile. In addition to the official forms of atropine and belladonna, one can prescribe Bellafoline or Bellal.

Scopolamine (hyoscine) is similar to atropine except that one of its side effects, cerebral depression, may be advantageous in some cases. Homatropine is an atropine derivative that is less potent and of shorter duration of action. Therapeutic potency is lowered in about the same degree as toxicity, therefore it offers no material advantage. Homatropine methylbromide is available as Homatromide, Mesopine or Novatrine.

Trasentine and Syntropan have enjoyed some vogue because of an apparent freedom from dry mouth, cycloplegia and tachycardia, but it has been pretty well demonstrated that the recommended doses are ineffective therapeutically and effective doses are not tolerated any better than atropine. Three newer drugs, Bentyl, Prantal and Tricoloid have been reported to be more selective than atropine.

When Banthine was first introduced, clinicians said, "at last we have a drug which will effectively diminish acid secretion by the stomach," but we find that it is pretty much like atropine, mostly a motor depressant. Probanthine and Pamine are now being promoted as antisecretory as well as spasmolytic agents, but much work is yet to be done before one can accept such a view with confidence. These three drugs are ganglionic blocking agents as well as antagonists to acetylcholine at the myoneural junctions, and large doses depress the sympathetic ganglia as well as those of the parasympathetic system. For this reason, side actions are apt to be more troublesome with them than with atropine.

COMMON PREPARATIONS AND APPROXIMATE RETAIL PRICE

Banthine	100	mg. tablet	9c
Bellafoline (1-hyoscyamine)	0.25	mg. tablet	6c
Bellal (mixed alkaloids)	0.13	mg. tablet	3c
Bentyl	10	mg. capsule	7c
Homatromide (homatropine)	2.5	mg. tablet	3c
Mesopin (homatropine)	2.5	mg. tablet	4c
Novatrine (homatropine)	2.5	mg. tablet	7c
Pamine	2.5	mg. tablet	7c
Prantal	100	mg. tablet	10c
Probanthine	15	mg. tablet	9c
Syntropan	100	mg. tablet	7c
Trasentine	75	mg. tablet	5c
Tricoloid	50	mg. tablet	9c

It seems that any drug which effectively depresses parasympathetic action is bound to have unwanted side effects, but the search goes on and some day it will doubtless succeed. In the meantime there are numerous drugs that will do what belladonna or atropine do, but none that do it much better or as inexpensively.

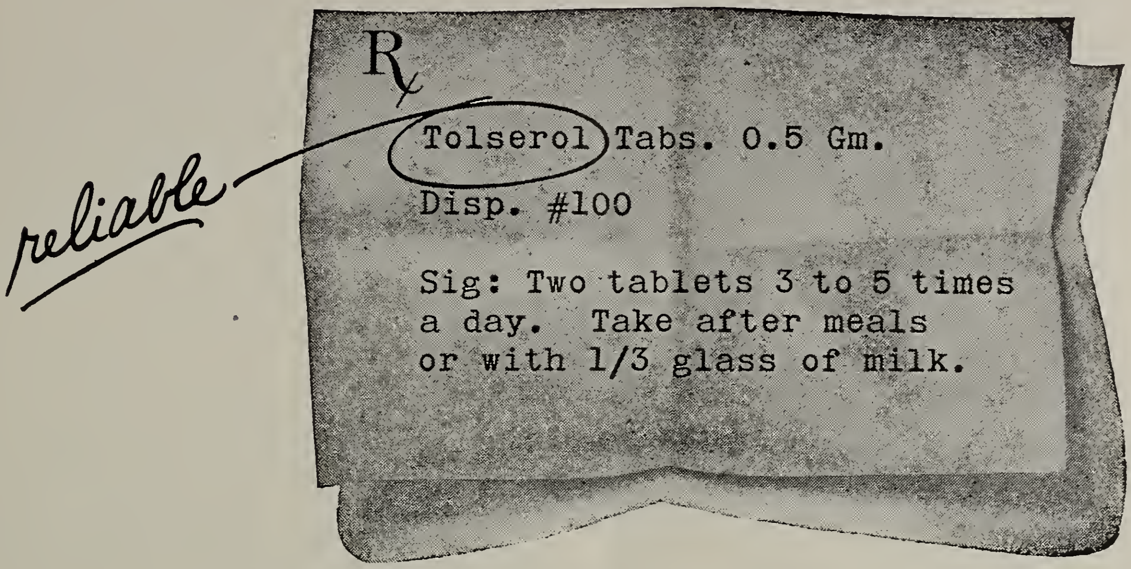
In the treatment of gastrointestinal problems it is frequently desirable to combine a sedative with a spasmolytic, and most of the drugs listed are available in combination with phenobarbital. The products combining belladonna alkaloids with phenobarbital are too numerous to list, and they have the distinct disadvantage of being in fixed ratio so that the physician cannot change the dose of one component.

If one is to avoid this difficulty he must extemporize his prescriptions. This in effect calls for a liquid which is easy to compound and inexpensive. A simple rule to remember is that 2 mg. (gr. 1/30) of atropine in a prescription for 60 cc. (fifteen doses) will give the approximate equivalent of 10 minims of tincture of belladonna. Phenobarbital sodium in the amount of 0.25 grams (gr.iv) will give 15 mg. (gr.1/4) in each teaspoonful. The basic prescription will therefore be:

℞: Atropine sulfate ...... 0.002 gm. (gr.1/30)
Phenobarbital sodium 0.250 gm. (gr.iv)
Vehicle q.s. ad .... 60.000 (oz.ii)

The vehicle may be plain water, an aromatic water, a syrup or an elixir. The proportions of the ingredients can be varied according to the requirements and the quantity of the prescription can be doubled with ease. An eight ounce bottle will cost the patient about $2.00. The working man can purchase one or two 15 cc. bottles to carry individual doses with him in his watch pocket or lunch pail, thus minimizing the inconvenience of liquid medication.

RAPID ABSORPTION—*MAXIMUM THERAPEUTIC EFFECT*



℞

Tolserol Tabs. 0.5 Gm.

Disp. #100

Sig: Two tablets 3 to 5 times
a day. Take after meals
or with 1/3 glass of milk.

The clinical effectiveness of different brands of mephenesin tablets depends on their rate of absorption. A mephenesin tablet that disintegrates slowly is absorbed slowly. The resulting low blood levels may never produce a maximum therapeutic effect. Results with such a tablet are usually poor.

Tolserol Tablets are a result of extensive study and are formulated to disintegrate rapidly for fast absorption, thus maintaining optimum blood levels.

Tolserol

(Squibb Mephenesin)

Complete information on the use of Tolserol in muscle spasm of rheumatic disorders, in neurologic disorders and in acute alcoholism is available from the Professional Service Department, Squibb, 745 Fifth Avenue, New York 22, N. Y.

SQUIBB

Every man owes a part of his time and his money to the profession in which he is engaged.—Theodore Roosevelt.

Among Ourselves

(Editorially Speaking)

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Made to Be Broken?

This is open season for making resolutions, which allows eleven months for breaking them. By some perverse *non sequitur,* we jump to asking a few questions. Why do most physicians join medical organizations; what advantages accrue to members; how should we improve these services; and, if such improvements are needed or desired, when will they come about?

Probably the most impelling answer to the first question, is that some confrere has told the neophyte he "oughta." There may be some adventitious comment about "not getting on a hospital staff," yet the most potent persuasion for joining seems to be, "you oughta do it, everybody else does, and if you're gonna amount to anything, you gotta." On close scrutiny, this reasoning is neither cogent nor profound, but seems acceptable.

Of course, various scientific meetings and publications usually are mentioned as educational media as inducements. In fact, these phases (which should occupy a position of prime importance) often are relegated to the "etc." berth. We are often asked the advantages of belonging to "organized medicine." And, although one may talk all day long, the essence of such claimed advantages may well be distilled into the few thoughts already expressed.

What other benefits should a member receive from the ideal medical association? Should there be a group life insurance policy, automatic on joining and with reduced premiums (due to blanket coverage) as a part of the annual dues? This may seem superfluous to most physicians, yet a few physicians' widows would gratefully welcome such help. Or, is there a need for enforced retirement facilities, in case catastrophic bad luck overcomes a few of our members? Should we better acquaint all our members with medical organization activities, locally and nationally, as in a newsletter—less formal, less public, more personal than in the usual publications? We don't know, but some medical organizations offer these advantages.

These are but a few of many items sincere and conscientious members have wondered about. No one knows all the answers, but these topics make nice thinking material, perhaps some will say pipe-dreams. Certainly some of these deserve serious, intelligent consideration, possibly New Year's Resolutions—probably to be broken.

Vincent T. Williams, M.D.

Indifference

No one will ever know how close we came to having socialized medicine slipped over on us. Many—too many of us—although not in favor of state medicine, were apathetic and indifferent about the matter to the extent that we did nothing to defend the private practice of medicine.

We should note the present trends, even though they might be transient, and keep alert and on the defensive and not relax the least bit. One shudders at the thought of another radical political upheaval. It could well spell our doom.

How should we act? We should support the committees and agencies working in our behalf—and, in particular, our own organized body. Further than that we can, or should, work on the broad basis of personal relationships. We can talk to our patients and friends and begin dispelling the doubts and distrust sowed by hostile and entirely unfair propaganda over twenty years of administration itching for socialized medicine, because that would be the keystone of a socialized state.

If we would all really get busy, cease being apathetic and indifferent, and start friendly discussions with our patients and other friends, we could exert a tremendous total effect over a wide front. But for the sake of Aesculapius and

Hippocrates it's time to cease being too apathetic and too indifferent and too lazy to defend our vital interests as well as those of the nation.

F. T. H'Doubler, M.D.

Gently Truthful or Brutally Frank

When a patient enters your office, that patient enters in search of truth about his illness. If his illness be a minor one with a favorable prognosis, then frankness and simplicity prevail, truth is evident and is, as a rule, easily conveyed to the patient either in words or in end results. Were all patients as easily treated as this then the practice of medicine would be an exact science and simple to exercise, indeed. We, as physicians, know that the practice of medicine is not an exact science; that it is an art, as art which can be acquired only with sound basic training mellowed by experience and administered with understanding and sympathy.

In the case of a patient with a severe and complicated illness and a guarded or unfavorable prognosis the truth can become complex. Some patients cannot accept the whole truth at one time. Truth must be gradually administered in desensitized doses. This is where the individual physician's judgment and art enter the picture. Herein lie the variations in men of medicine.

In the case of advanced malignancy or terminal disease of other types with a fatal prognosis the problem of truth may become even more complex. Hope in the most hopeless case must be utterly and brutally destroyed. When you destroy hope you destroy life, and it is not the duty of a physician to destroy life. Every physician has, of course, patients of variable personalities and dispositions, and some are trying at times. But remember, more physicians are condemned for lack of understanding and sympathy than for lack of professional knowledge or skill. Patients expect understanding and sympathy of their physician. At times illness is of secondary importance to a confused mind and soul.

Again, remember when you present the facts it is not only what you present but how you present them that marks you as a true physician. You can be gently truthful or brutally frank.

Martyn Schattyn, M.D.

Considerations in Intractable Congestive Failure

Such accepted therapeutic measures as rest, Digitalis, sodium restriction and mercurials are effective in the hands of almost every practitioner. Results may be most dramatic in the case of apprehensive, dyspneic, water-logged victims, but we must concede that some of these hapless people do not respond so spectacularly to such a regime and others who, for a time, show remarkable improvement, may later fail to show continuing response. It is in the management of these intractable or refractory cases that an understanding of the anatomic and physiologic bases of the disease, careful investigation and good clinical judgment may turn the tide in a favorable manner.

One must assume that accurate etiologic diagnosis has been made and proper therapy applied. Contributory factors such as nutritional deficiency, anemia, diabetes, diffuse bilateral pulmonary disease and chronic infection may be amenable to treatment. Arrhythmias should be converted to normal rhythm whenever possible. Thromboembolic phenomena arising from thrombi in the systemic veins or within the heart itself often complicate the picture and foci must be eliminated. Reduction of metabolic demands upon the heart through the use of antithyroid drugs may be of value in resistant cases.

One of the newest and most fascinating, if perplexing, facets in the problem of controlling difficult cases of congestive failure is that of electrolyte metabolism. Understanding of the basis for and treatment of electrolyte imbalance is of extreme importance if one is to care for those with refractory congestive failure adequately. In the failing heart, the cardiac output is reduced with consequent decrease in renal glomerular filtration rate, alteration in glomerulotubular balance and retention of sodium. Mercurial diuretics inhibit the reabsorption of chloride and this atom carries with it sodium and water. Overenthusiastic use of mercurials may so deplete the body of chloride as to prevent subsequent mercurial diuresis even though the patient is still edematous. More serious is the development of the low-sodium syndrome which results from frequent mercurial injections in a patient whose sodium intake is markedly reduced. Such patients may also become unresponsive to mercurials. The loss of chlorides that occurs during mercurial diuresis also carries off potassium and may lead to profound muscle weakness and accentuation of digitalis intoxication.

If one or more of these factors are discovered, it is almost always possible to institute therapy which if successful will help relieve the load on the heart or correct imbalances which prevent diuresis. We have been able by use of these adjunctive measures to influence favorably the course of many otherwise refractory cases of congestive heart failure.

Allen I. Herman, M.D.

Fraternally Yours

More on Medical Meetings

Since we last talked things over on this page, your reporter has attended several medical meetings which warrant some comment.

The first of these was the Fifth Annual Assembly of the Missouri Academy of General Practice held in Jefferson City the last of October. There were about 150 members present, out of a total of some 500 in the state, which was a reasonably good attendance for this five year old group. You have already read in MISSOURI MEDICINE about the new officers and the highlights of the scientific program.

As anyone might suspect, the program was for Momedics, and largely was presented by the same. As it looked to us, it was a well balanced program, and the audience seemed to enjoy this portion of their meeting.

We heard some comments that "there should have been more fellows here," but this statement is made about virtually every meeting. Others who were asked about their reactions to the meeting seemed to feel it "moved kinda slow, not much zip." This type of criticism was not wide-spread, however, as judged by our own questioning of several who were there.

Certainly, this annual meeting is a step in the right direction for the General Practitioners group, if they wish to establish and maintain their own autonomy, and if they are to achieve the particular prestige which they justly deserve.

Let's skip any discussion of our trip to Jeff City on November 4, to present "Medical Writing," before the Cole County Medical Society. Enjoyed meeting old friends, and hope our talk wasn't too boring to the members and their wives.

The next day, November 5, we attended the Clay County Medical Society Clinical Conference at Excelsior Springs. This is one of the best of the "one-two punch" programs in our state. They present a neat educational package each year, and for a one day "show" it's hard to beat.

This year, they had Sodeman, the new professor of medicine at M.U.; Sheldon, anesthesiologist of Kansas City; McGlone, professor of medicine at Colorado U.; Hansel, outstanding E.N.T.-allergist of St. L.; Musser, professor of medicine, Wisconsin U., and others. Their scientific presentations were slanted to cover the mostest in the quickest with the fewest. And this they did—in a grand style.

Next year, the Claycomo Momedics promise us bigger and better things for their Centennial Meeting. Their promise of surprises at this next annual meeting would have to go some to beat this year's meeting. Parenthetically, did you know the Clay County boys are the No. 2 medical group, in point of age, in our State? Didn't either, until now.

Of course, the biggest meeting of all was the A.M.A., 7th Annual Clinical Session, held Dec. 1 to 4, in St. Louis. This opens, each year, with a Public Relations forum. These shindigs are somewhat redundant for county or state societies with any get-up-and-go, but are stimulating for those groups which have been dragging their feet. The greatest asset of these conferences is simply stated: Is our group behind, up with, or ahead of, what the others are doing?

Each year some new adjuncts or gimmicks are emphasized; each year there certainly is food for thought (and for self-improvement) if these seminars on public relations are carefully evaluated with realism and objectivity.

On Tuesday afternoon the real "show" began with science, politics and everything thrown at you in rapid-fire fashion. In fact, all these A.M.A. sessions (interim or otherwise) remind one of the three blind men trying to describe an elephant. One tells of the trunk, another the tail, while the third describes a leg. Each of these A.M.A. productions means an entirely different thing to each person. Some come for pure science, bringing their note-books, actually making with scribbles. Others are the "medical politicians"; they get to the House of Delegates meetings, the hearings on resolutions, maybe get over one morning or afternoon for the scientific stuff, and they've had it! Still others register, head for van Gogh exhibits or baseball (if in season), anything to get away from the practice of medicine, the science thereof, or even the political stratagems attached thereto. We don't blame anyone, its legal, non-fattening and, mostly, not immoral.

This session seemed devoid of fireworks, pepper or spice. Merely a so-whattish setup in all categories, at least this was the story we heard. But then, there must have been several reasons for around 2,700 members of the A.M.A. to attend. Yet, this is hardly more than the number *we should have as members of the M.S.M.A.*, and this gathering from the whole U.S.A.! V. T. W.

Protein-Glucose Utilization

Slow intravenous infusion of amino acids and glucose mixtures results in better utilization than when either nutriment is used alone, particularly with inadequate caloric intakes. Increased speed of infusion defeats the purpose of the mixtures.—Robert Elman, M.D., *Journal of Clinical Nutrition.*

Missouri Medical Meetings

Missouri State Medical Association Annual Session, St. Louis, April 4-7, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Thursday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Cass County Medical Society—meets quarterly on third Thursday of month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Marion-Ralls County Medical Society—fourth Tuesday of each month, 7:30 p. m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Charles County Medical Society—third Thursday of each month.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

Musings of the Field Secretary

The 1954 "March of Dimes" is shooting for big game this year. It is reported by Basil O'Connor, President of the National Foundation for Infantile Paralysis, that a new polio vaccine, developed by Dr. Jonas E. Salk, of the University of Pittsburgh under a foundation grant, will be trial tested on 1,000,000 second grade pupils in some 200 selected counties over the United States at a cost of approximately $7,500,000. It is contemplated beginning these inoculations in early February 1954. This undertaking, plus continued larger purchases of gamma globulin, will be greatly influenced by the support given the forthcoming "March of Dimes." Wilbur (Sparky) Stalcup, Basketball Coach, University of Missouri, who is again Missouri State Chairman of the National Foundation for Infantile Paralysis, and his Advisory Committee are making every effort to put Missouri "over the top" in this year's campaign. They will need the help of every Missourian.

Changes seem to be taking place in all fields of endeavor these days. Up in Clark County, Missouri, folks used to stay at home and have their babies. They did not have any hospitals in the county some might say. They still do not have any but borrowing one in someone else's county seems to be in style up there now. During 1953, up to November 1, out of approximately 150 births to Clark Countians only fourteen were consummated in Clark County.

More and more county medical societies are having their meetings adorned by the wives' attendance. In these situations dinner meetings are the order of the day. Generally, after full enjoyment of breaking bread together, the doctors hold their scientific program separately from the program the ladies arrange. Everyone appears to gain from this procedure—that is, the doctor and his better half have the major part of an evening together, "mamma" gets to dress up a bit and to eat someone else's cooking and the doctor has opportunity to find out what's been happening to the "kids" during the last two weeks as they leisurely enjoy the dinner part of the meeting together.

The Missouri Indigent Medical and Hospital Care Survey sponsored by the Missouri Health Council to ascertain just what the problem is in rural Missouri is getting under way. Cooper County is being used as a pilot study before launching the full scale survey. Data is obtained from the County Welfare office, County Court, public health nurses, hospitals, various health organizations and from the practicing physicians. The survey is being made for the Missouri Health Council by the Institute of Research of the University of Missouri.

Members in the News

The final twelve appointments for membership on the Hoover Commission task force on medical services have been announced. From Missouri, **Evarts A. Graham**, M.D., Washington University Medical School, and Dr. Otto W. Brandhorst, dean of Washington U. School of Dentistry are the new members.

The Medical Society of Milwaukee County heard a paper on "The Treatment of Urinary Tract Infections" by **Grayson L. Carroll**, M.D., St. Louis.

The Ninth Annual Course in Surgery at Kansas University School of Medicine, which will meet early in January, lists among the guest instructors **Eugene M. Bricker**, M.D., St. Louis.

The 130 patients at the Children's Mercy Hospital, Kansas City, enjoyed a dinner based on the Reserve Grand Champion Lamb at the American Royal, given to the hospital by Eddie Williams. He paid $5.05 per pound for the lamb at the Royal Auction.

Under the direction of **Donald R. Black**, M.D., Kansas City, local druggists in that city started furnishing free test materials to customers in a diabetes detection program.

According to Vice President Leslie Cowan, bids on the $13½ million medical center for M.U. Medical School were opened early in December.

One of three newly-elected directors of the Association of American Physicians and Surgeons is **Thomas L. Dwyer**, M.D., Mexico.

Under the direction of **W. H. Goodson, Jr.**, M.D., the Kansas City Amateur Moviemakers held their annual 16 mm. film contest at the Nelson Art Gallery in Kansas City. Dr. Goodson's film was awarded the second prize in the competition.

New Dean of the Washington University School of Medicine, but with a familiar name, has been announced by Chancellor Arthur H. Compton, effective March 15. **Carl V. Moore**, M.D., Professor of Medicine since 1945, replaces **Robert A. Moore**, M.D., who is now at Pittsburgh.

MoMedics **Dan Yancey**, M.D., and **C. B. Meyer**, M.D., both of Springfield, were widely quoted in an AP release when they operated on New York Yankee Center fielder Mickey Mantle.

The annual Eben J. Carey Memorial lecture at Creighton University School of Medicine, Omaha, was delivered by **James W. Colbert, Jr.**, M.D., Dean of St. Louis University School of Medicine. Dr. Colbert's topic was "Viral Hepatitis."

The Kansas City Area Hospital Council meeting in Kansas City, heard *Hospitals* editor C. J. Foley, Harold Baumgarten, Hospital Relation Director of the Blue Cross Commission, both of Chicago, Chester Starr, Jefferson City, Director of Rural Health Service for the Missouri Farm Bureau Federation and **David Littauer**, M.D., St. Louis, president of the Missouri Hospital Association.

A committee has been named to organize a drive to secure funds in the amount of $250,000 for a small hospital in Albany.

John Q. Phelps, M.D., for many years a prominent Doctor of DeKalb County, died in the early fall in Cheyenne, Wyoming.

From Osceola, **O. B. Chandler**, M.D., has resumed his medical practice in New Madrid.

Howard B. Lang, Jr., announced in mid-October that the drive for the Boone County Hospital Addition had passed the $50,000 mark.

The opening meeting of the winter series of Parent study groups at the St. Louis Society for Crippled Children heard **Alex Harell**, M.D., discuss mechanical aids in the home treatment of crippled children.

James F. Maddux, M.D., Kansas City, discussed recent trends in Psychiatric Clinics for Children at the St. Joseph YWCA.

C. A. Brasher, M.D., Superintendent of the Missouri State Sanatorium at Mt. Vernon, has announced the appointment of **John W. Polk**, M.D. as chief surgeon. Dr. Polk recently left Memphis where he had been chief resident in thoracic surgery at the VA Hospital.

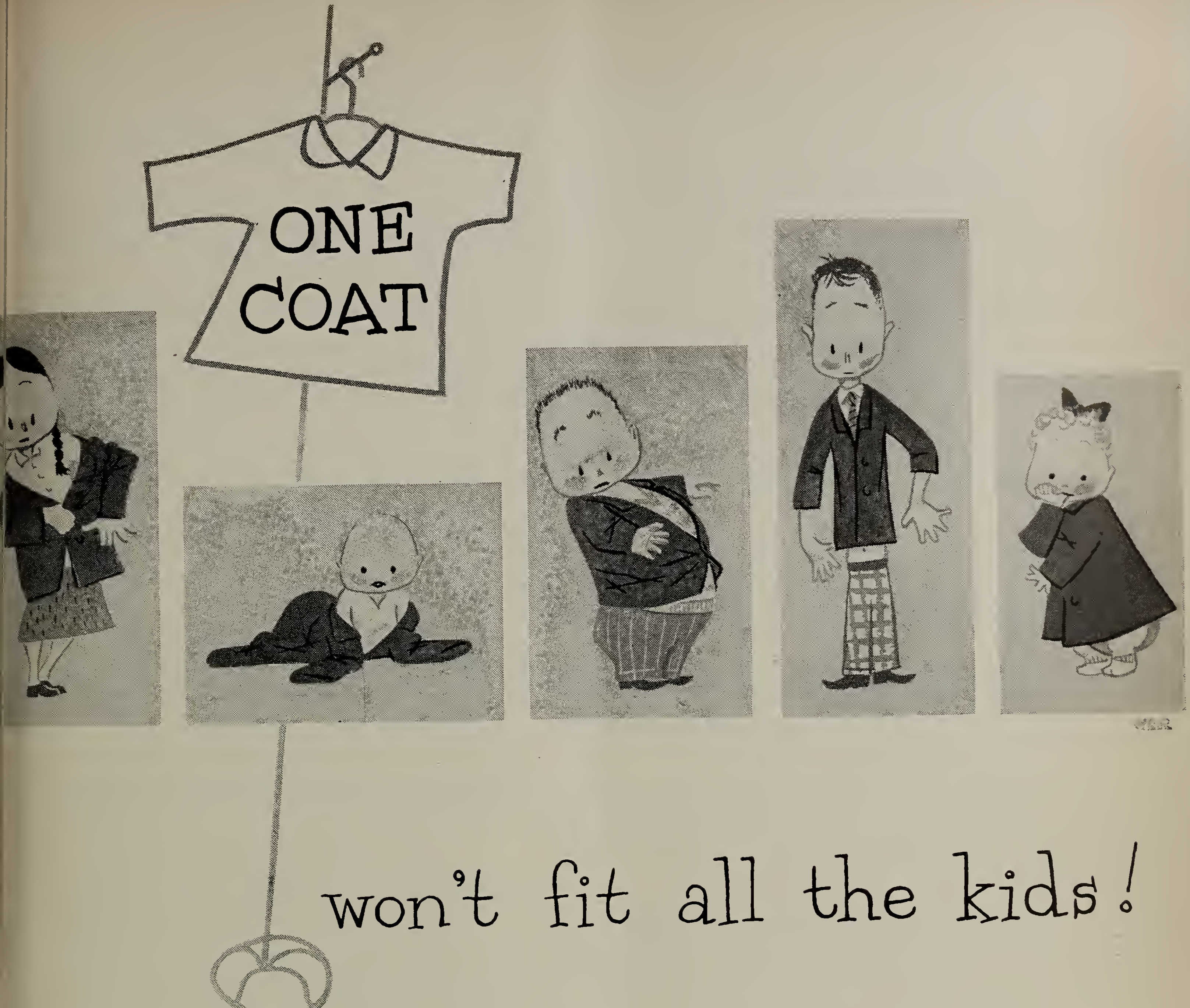
Clay County's first public meeting sponsored by the local Medical Society heard **Wayne Hart**, M.D., Kansas City, discuss poliomyelitis.

Missouri needs better recreational facilities and more special schools for mentally retarded and physically handicapped children according to Dr. Leonard W. Mayo, director of the Association for the Aid of Crippled Children. Dr. Mayo was introduced to the 500 persons attending the Missouri Association for Social Welfare meeting in Excelsior Springs by **Stuart A. Queen**, M.D., St. Louis.

Cecil M. Kohn, M.D., was elected president of the Kansas City Jewish Community Center.

American Board Surgeon, **John R. Green**, M.D., has opened offices in Independence.

The *Kansas City Times* carried a feature story about the new radioactive study laboratory at Menorah Hospital in that city. The "hot" lab is under the direction of Leonard Walker, Ph.D.


ONE
COAT
won't fit all the kids!

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Kansas City
Saint Louis

Plans have been announced by the Daughters of Charity of St. Vincent de Paul for an 87 bed psychiatric addition to St. Vincent's Hospital in St. Louis.

The annual W. K. Kellogg Foundation Scholarships at Missouri University Medical School have been awarded to Bob D. Holland, Bronaugh; J. H. Morris, Jr., Kansas City; Ted R. Nehrenberg, Slater; Ethelee Ray, Gravois Mills, and Ray A. Thiele, Bel-Nor.

More than 100 buildings situated on 152 acres at the O'Reilly Army Hospital have been turned over to the General Services administration for disposal. The former State Pythian home area still continues to be used for army organized reserve training.

N. Venay Bolin, M.D., formerly regional VA Chief of Psychiatry and Neurology, has announced his association with **B. Landis Elliott**, M.D., Kansas City.

Kansas City physicians **Pat Nunn**, M.D., **John Growdon**, M.D., **Joe Welker**, M.D., **Joe Getelson**, M.D., **R. C. Davis**, M.D., **Lester Safterstein**, M.D., and **George V. Feist**, M.D., were in attendance at the Interstate Postgraduate Medical Assembly in Chicago.

A. N. Arneson, M.D., placed a wreath on the grave of Dr. William Beaumont in Bellefontaine Cemetery, St. Louis, as part of the annual birthday pilgrimage to honor the physician.

Harold L. Gainey, M.D., Kansas City, was reelected secretary-treasurer of the Central Association of Obstetricians and Gynecologists at their annual meeting in Houston.

The A.M.A. Washington Letter states that Dr. Frank Brown Berry will succeed Dr. Melvin A. Casberg as Assistant Secretary of Defense for Health and Medical Affairs shortly after the first of the year. Dr. Berry, a retired brigadier general, is professor of clinical surgery at Columbia University Medical School. Dr. Casberg plans on returning to private practice in Solvang, California.

At Harrisonville, the West Central Missouri Medical Society held a social hour, dinner and scientific meeting. At the latter, papers were presented by **John A. Growdon**, M.D., and **Joseph C. Williams**, M.D., both of Kansas City.

"New Advances in the Surgical Treatment of Cerebral Palsy" was the subject of a talk before the United Cerebral Palsy Association by **William Q. Wu**, M.D., Kansas City.

A large and appreciative attendance at the Kansas City Surgical Society meeting heard **N. Frederik Hicken**, M.D., Salt Lake City, discuss biliary tract disease.

On the twentieth anniversary of her death, Dr. Katharine Berry Richardson, the founder of Children's Mercy Hospital, Kansas City, was the subject of a feature article in the *Kansas City Star*.

The Jackson County Health forum lecture late in November, "Getting Along with Diabetes," was delivered by **Cyril M. MacBryde**, M.D., director of the Endocrine and Metabolism Clinic at Washington University.

First quarter appointments for the Springfield Heart Clinic were Doctors **Glenn O. Turner**, **Harold H. Lurie**, **James T. Good**, and **Edgar L. Clayton**.

Four members of the State Hospital Advisory Council were reappointed by Governor Phil M. Donnelly and two new ones added. The new members are **H. W. Carle**, M.D., St. Joseph, and **Arthur D. Markel**, M.D., Poplar Bluff.

Sister Margaret Alacoque, C.S.J., Kansas City, has taken over as superintendent of the ex-Marine hospital, now St. Joseph Hospital, Kirkwood.

Frank J. Nichols, M.D., is a new physician on the medical staff at the State Hospital in Fulton. He has also served on the staff of the hospitals in Farmington and Marshall.

Extremes in geography were the order as **Hugh G. Hamilton**, M.D. and **Robert S. Higgins**, M.D., both of Kansas City, attended medical meetings in Victoria, B. C., and Atlanta.

The Greene County Medical Secretaries and Assistants Society meeting at the Kentwood Arms Hotel, Springfield, heard Judge William R. Collinson speak on "Civil Liberties."

The Greene County Medical Society members were invited to the Ozarks County Medical Society meeting in Aurora in November. The program was sponsored by the Missouri Academy of General Practice and the cardiovascular section of St. Louis University and consisted of a panel discussion on the newer drugs in the management of hypertension. Members of the panel were **John Hammond**, M.D., **James P. Murphy**, M.D., and **Donald W. Bussman**, M.D., all of St. Louis.

St. Louis physician **George A. Carroll**, M.D., was elected president of the Missouri Division of the American Cancer Society, succeeding **Everett D. Sugarbaker**, M.D., Jefferson City.

The only Kansas Citian on the seven member board of the Missouri State Board of Nursing was appointed by Governor Phil M. Donnelly. She is Sister Mary Fabian Hutti, C.S.J.

The most recent book on emergency surgery edited by Bernard J. Ficarra contains a section on acute infections and traumatic injuries of the hand written by **Wallace H. Graham**, M.D., Kansas City.

An automobile accident near Jacksonville, Ill., resulted in head, hip and chest injuries to Kansas City physician **Wm. F. Kuhn, II.** He was hospitalized in Passavant Hospital at Jacksonville.

"Gout" was the topic of the discussion held December 17 at Kansas City General Hospital. The speaker was Alexander B. Gutman, Professor of Medicine at Columbia University and Editor of the *American Journal of Medicine.*

On December 1, Dr. Howard A. Rusk, Professor of Physical Medicine and head of the department of physical medicine and rehabilitation at N.Y.U. spoke at the Jackson County Medical Society meeting on "Dynamic Therapeutics of Chronic Disease."

Macon district public health officer, **W. S. Petty**, M.D., spoke at a meeting of the Clay County Health Council on the role of the county health department in a polio epidemic.

Richard H. Kiene, M.D., Kansas City, spoke on "Early Recognition of Orthopedic Conditions in Childhood," and **F. T. H'Doubler, Jr.**, M.D., Springfield, on "Radioactive Iodine in Medicine" at the October meeting of the Greene County Medical Society.

A strictly native-son class, 44 Missourians, have been admitted as the first year class in medicine at the University of Missouri.

The Greater Kansas City Heart Association sponsored a panel discussion at the meeting of the Missouri Association of Licensed Nursing Homes. "Care of the Elderly with Heart Disease" was discussed by **Harold M. Roberts**, M.D. and **Philip L. Byers**, M.D., both of Kansas City.

The Woman's City Club heard a description of his recent trip to Europe and North Africa by **Edward Hashinger**, M.D., Kansas City.

Sarcoxie physician, **W. B. York**, M.D., attended a reunion of the graduates of St. John's Hospital School of Nursing in St. Louis. Dr. York was a member of the first class of graduate nurses from St. John's in 1913, worked at the hospital for a time, and then at the insistence of the sisters, studied medicine. The physician, who lives in Carthage, goes to his Sarcoxie office only five days a week due to failing eyesight.

The only M.D. in Hickman Mills, Dr. **Irving H. Clark**, has opened his offices in that town.

Columbia's **John D. Talbert**, M.D., son of Professor and Mrs. T. J. Talbert, has accepted a position as regional Medical Director with the Pennsylvania Railroad.

New president of the Doctor's Medical Foundation, succeeding Dr. **Jerome I. Simon**, is **William G. Becke**, M.D., Ladue.

The Vitale Medical Foundation honored two veteran St. Louis physicians with awards of merit. The certificates, presented by **Andrew Hall, Jr.**, M.D. were awarded to **Garnet C. Lyttle**, M.D., and **John C. Morfit**, M.D., both of St. Louis.

S. Ross Melgaard, M.D., Kansas City, was not injured in an auto wreck in Kansas City. Dr. Melgaard was driving a 1928 Rolls Royce.

One in a series of vocational guidance talks to the Order of DeMolay, was delivered by **Graham A. Asher**, M.D., Kansas City, who discussed the Profession of Medicine.

A tract of land in Kansas City, North was selected as the site for the proposed 100 bed Clay County Memorial Hospital.

American Board of Surgery Diplomate, **John A. Flatley**, M.D., has opened his office in Raytown.

On the heels of a $2,000,000 expansion program, Burge Hospital, Springfield, has received approval on its $1,050,000 expansion program for a new Crippled Children's Hospital.

Former St. Louisian, Momedic **Melvin Casberg**, Assistant Secretary of Defense, recently announced proposed legislation for "more equitable" distribution of medical care for dependents of servicemen. He also revealed that proposed measures would be introduced in Washington, which would establish scholarships in the nation's civilian medical, dental and nursing schools, in an effort to prevent repetitions in the future of so-called "doctor draft" measures.

"Adenocarcinoma of the Appendix" was the subject of a paper presented by **Paul A. Knepper**, M.D., St. Joseph, at the Western Surgical Society meeting in Chicago on December 3.

Members of the Medical Secretaries and Assistants Society of Greater St. Louis visited the Eli Lilly Company on November 15 to 17 as guests of the company. Twenty-seven were in the group which inspected the Lilly Research Laboratories and toured pharmaceutical, biological and antibiotic production facilities while in Indianapolis.

Wilfred E. Wooldridge, M.D., Springfield, presented his fourth annual vocal program at Drury College on November 16. The programs at Drury are an annual event for Springfieldians. In addition, this year, Dr. Wooldridge performed as guest soloist with the Joplin Civic Symphony. The Springfield program presented by Dr. Wooldridge, a baritone, consisted entirely of English and American songs.

Hal E. Freeman, M.D., Springfield, presented a paper on "Seborrhea-Psoriasis Syndrome" before the Dermatology Section at the recent meeting of the Southern Medical Association.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

On Thursday night, November 12, the Grand River Medical Society and its Woman's Auxiliary held a dinner meeting at the Strand Hotel, Chillicothe. Following dinner the ladies held their own meeting while the doctors listened to a panel discussion on "Newer Drugs in the Management of Hypertension" furnished by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School. The panel members were **E. Lee Shrader**, M.D., **John J. Inkley**, M.D., and **William F. Abrams**, M.D., all of St. Louis. Thirty-two doctors were on hand to hear this interesting discussion.

Meeting of Grand River Medical Society

E. A. Duffy, M.D., *Secretary*

Clay County Medical Society

A dinner meeting of the Clay County Medical Society and its Woman's Auxiliary was held Tuesday evening, October 27, at St. Luke's Episcopal Church, Excelsior Springs. The scientific program of the evening was presented by Dr. **S. F. White**, Kansas City, who discussed "Obscure Upper Urinary Tract Pathology." A good attendance was on hand to benefit from this program.

Clay County Medical Society Meeting

S. R. McCracken, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Marion-Ralls-Shelby Counties Medical Society

A dinner meeting of the Marion-Ralls-Shelby Counties Medical Society was held at the Mark Twain Hotel, Hannibal, on Tuesday night, November 24.

The scientific program of the evening was a panel discussion on "Newer Drugs in the Management of Hypertension" presented by St. Louis University Medical School in cooperation with the Missouri Academy of General Practice. The speakers on the panel were **James J. Janney, Jr.**, M.D., **R. Emmet Kelly**, M.D., and **Paul M. Scheele**, M.D., all of St. Louis. A lively discussion followed the presentation by the panel. Thirty-one physicians were present at this meeting.

Robert J. Lanning, M.D., *Secretary*

Chariton-Macon-Monroe-Randolph Counties Medical Society

The Chariton-Macon-Monroe-Randolph Counties Medical Society held its regular monthly meeting at the Woodland Hospital, Moberly, on Thursday night, November 12. The scientific program for the evening consisted of sound motion pictures, "Diagnosis of Poliomyelitis" and "The Autonomic Nervous System" which were furnished by the National Foundation for Infantile Paralysis. Twenty physicians were in attendance.

C. C. Cohrs, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Lincoln-St. Charles Counties Medical Society

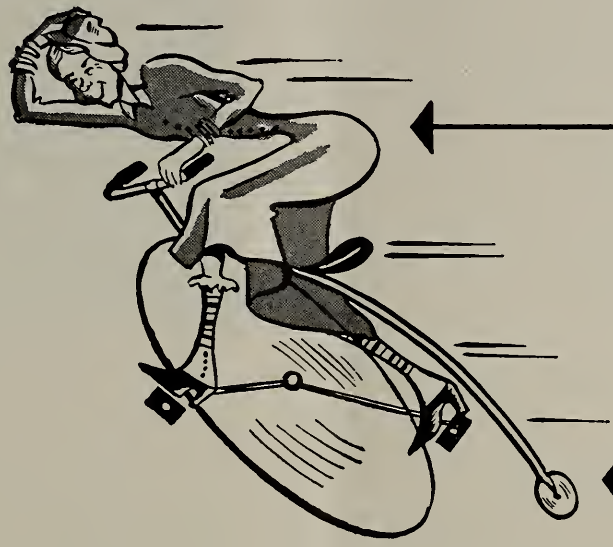
The Lincoln-St. Charles Counties Medical Society met at the Southern Air Restaurant on Thursday night, November 19, for dinner and an interesting scientific program. Dr. **C. Alan McAfee**, St. Louis, spoke on "The Managament of Benign Diseases of the Large Bowel" and Dr. **Michael M. Karl**, St. Louis, discussed "Newer Concepts in the Management of Liver Disease." This program was presented under the auspices of the Missouri Academy of General Practice. Seventeen physicians were in attendance.

J. C. Creech, M.D., *Secretary*

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society has held in Herculaneum, on Friday night, November 27. The scientific program for the evening was presented by Dr. **Robert W. Bartlett**, St. Louis, who discussed "Diagnosis and Treatment of Abdominal Pain in the Upper Right Quadrant." An interesting

Times change



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general discussion followed the formal presentation of this talk.

J. F. Rutledge, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

On Thursday night, November 19, the Missouri Academy of General Practice in cooperation with the Medical School of the University of Missouri sponsored a postgraduate meeting at the University of Missouri to which were invited all County Medical Society members within a radius of approximately sixty miles of Columbia. The program of the evening was as follows: Dr. **Roscoe L. Pullen,** Dean and Professor of Medicine, University of Missouri, spoke on "Pneumonias"; Dr. **William B. See,** Assistant Professor of Obstetrics, University of Missouri, discussed "Bleeding in Third Trimester of Pregnancy." Fifty persons attended this session including doctors and medical students.

J. Loren Washburn, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

The West Central Missouri Medical Society met at Harrisonville for a dinner meeting on Thursday night, November 12. The wives of the doctors adorned this meeting with their presence and while the scientific program was in progress they held a separate organizational meeting of the auxiliary. The evening festivities began with a social hour held at the home of Dr. and Mrs. O. B. Barger, Secretary of this Society.

The scientific program was furnished under the auspices of the Missouri Academy of General Practice and presented **John Growdon,** M.D., Kansas City, on "General Considerations in Preoperative and Postoperative Care of the Surgical Patient"; **Joseph C. Williams, Jr.,** M.D., Kansas City, on "Diagnosis and Treatment in Dysmenorrhea and Functional Uterine Bleeding." Twenty-nine physicians attended this pleasant affair.

O. B. Barger, M.D., *Secretary*

Joint Meeting of Henry, Johnson, Pettis and Saline County Medical Societies

A joint dinner meeting of the Henry, Johnson, Pettis and Saline County Medical Societies was held at the Bothwell Hospital, Sedalia, Wednesday night, November 18. The scientific program of the evening was sponsored by the Missouri Academy of General Practice to wit: **Herbert J. Rinkel,** M.D., Kansas City, on "Allergy"; **Stoughton F. White,** M.D., Kansas City, on "Surgical Indications in Genito-Urinary Disease."

Ray Hollingsworth, M.D.,
Chairman for the Meeting

EIGHTH COUNCILOR DISTRICT

W. S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

Twenty-five physicians attended a dinner meeting of the Ozarks Medical Society at Aurora on Tuesday night, November 10, and were privileged to hear an interesting presentation by a panel of physicians from the St. Louis University Medical School on "Newer Drugs in the Management of Hypertension." **John Hammond,** M.D., **James P. Murphy,** M.D. and **Donald W. Bussman,** M.D., all of St. Louis, composed the panel.

Meeting of Ozarks Medical Society

The wives of the doctors attended the dinner and then adjourned for a separate meeting. The scientific program for the meeting was a joint endeavor of the St. Louis University Medical School and the Missouri Academy of General Practice.

Arthur A. Mickel, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries Counties Medical Society

On November 19, the Phelps-Crawford-Dent-Pulaski-Maries Counties Medical Society held its regular November dinner meeting at Rolla. As usual the presence of the doctors wives added much to the meeting. The scientific program was furnished by the Missouri Academy of General Practice and was as follows: **George L. Hawkins, Jr.,** M.D., St. Louis, on "Emergency Treatment of Trauma of the Head and Back"; **Vilray P. Blair, Jr.,** M.D., St. Louis, on "The Emergency Treatment of Fractures." Twenty doctors were present at this interesting session.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner on Wednesday night, November 18, at Fredrick's Cafe west of Cabool with the following members and visitors present: Drs. **H. G. Frame** and **A. C. Ames,** Mountain Grove; **Garrett Hogg, Jr.,** Cabool; **T. J. Burns** and **J. B. Kelley,** Houston; **Leslie Randall,** Licking; **M. B. Perkins** and **Paul A. Davis,** Willow Springs; **J. N. Wiles,** West Plains; **C. W. Cooper,** Thayer; **Harold Miller,** Chicago, and **Harry Silsby** and **John Ferguson,** Springfield, and several of the wives.

After dinner the ladies went home with Mrs. Hogg for the evening and the doctors went to Dr. Hogg's office where the meeting came to order and Dr. Silsby spoke on "Peptic Ulcer" and Dr. Ferguson spoke on "Uterine Fibroids" and showed some slides. Dr. Perkins expressed the thanks of the society.

The minutes of the last meeting were then read and approved. Dr. Perkins read a letter from Dr. J. H. Summers, Councilor of this district. Some notices of coming medical meetings were also read and the meeting adjourned to meet in Willow Springs December 16.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

FRANK W. HALL, CAPE GIRARDEAU, COUNCILOR

An evening dinner meeting of the tenth Councilor District was held at the Marquette Hotel, Cape Girardeau, on Thursday night, November 12. Thirty-five physicians were present to hear **Dr. E. Claude Bohrer**, West Plains, President, Missouri State Medical Association, who spoke on "Yesterday, Today and Tomorrow" and **Dr. R. O. Muether**, St. Louis, who discussed "The Present Status of ACTH and Cortisone." The evening festivities began with a social hour followed by dinner and then the regular program.

Mineral Area County Medical Society

The Mineral Area County Medical Society met at the State Hospital, Farmington, on Thursday night, November 19, with eighteen physicians present. The scientific program of the evening was furnished by the Missouri Academy of General Practice and presented **John Herweg**, M.D., and **Bernard Bercu**, M.D., on the staff of the Washington University Medical School, who discussed "Acute Pulmonary and Upper Respiratory Diseases in Children and Adults." This discussion was followed by an interesting open discussion.

Jack Mullen, M.D., *Secretary*

NEW MEMBERS

Crispell, Lawrence S., M.D., Joplin
Martin, John N., M.D., Chillicothe
McDonough, Robert C., M.D., St. James
Rosenthal, Louis M., M.D., Kirksville
Warres, Herbert L., M.D., St. Joseph

. . . and high time

. . . happy to report what seems to be a respite... from antibiotics and endocrines. True, the major drug houses now give promise of raising quite as much noise and confusion by jumping on the "hypertension bandwagon." One of the most definite signs...that the antibiotic forces are a bit pressed for ammunition is what appears to be a retreat to that familiar bastion of triple sulfas. The trail is well marked....This column has deliberately avoided mention of the newer so-called hypotensive agents because of a confusion (aggravated by our clinical experience) which grows daily compounded...we pray that time will elucidate our confusion, allay our doubts, and clear our desks and consciences of gaily-colored snake-oil brochures.—"New Drugs," J. H. Trolinger, M.D., *J. Cape Girardeau County Medical Society.*

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News From Missouri's Three Medical Schools

ST. LOUIS UNIVERSITY

Reunion: The Class of 1903 was honored at the Golden Jubilee Reunion of the Medical Alumni of St. Louis University School of Medicine at a dinner dance, December 2. Honored at the dinner was Edward J. McCormick, M.D., President of the A.M.A., who received his M.D. from St. Louis University in 1915. Also included in the day's activities were reunions of the classes of 1928, and November 1943, an Open House for Alumni and their friends, and an informal reunion of members of the St. Mary's Group of Hospitals Alumni.

University Progress: St. Louis University School of Medicine had its actual beginning in 1836, nine months after a group of seven physicians met to establish the St. Louis Medical Society. Regular instruction at the School of Medicine began in 1842. The School of Medicine continued as part of the University until 1855, when it was separated from the University because of bitter political violence.

During the years that followed, other medical schools were established, and, in 1903, St. Louis University purchased Beaumont-Marion Sims Medical College.

Since 1903, the School of Medicine has seen the razing of the original buildings and the expansion of the School of Medicine.

New Buildings: The latest addition to the actual building is Schwitalla Hall, which houses the administrative offices, the Physiology, Pathology, and Biochemistry Departments, the Chapel and the Wohl Experimental Surgery Laboratory; the construction of the Firmin Desloge Hospital (by the University and the Sisters of St. Mary); St. Mary's Hospital (by the Sisters); and the completion of the Cancer Research Institute last year.

UNIVERSITY OF MISSOURI

New Faculty Additions: From Tulane, Dr. William A. Sodeman, Professor and Chairman of Medicine; from New York University and Washington University, Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery; from Ohio State, Dr. Herbert S. Goldberg, Assistant Professor of Microbiology; from St. Louis University, F. Eugene Doenges, Assistant Instructor in Anatomy; Dr. Arnold Funckes, Instructor in Biochemistry; Misses Norma Beckman, Assistant Professor of Nursing, and Joan Walsh, Instructor in Nursing.

Graduate Assistants: In Anatomy: Theodore Sadler, Benny H. Koon, Cecil Watson, William P. Dennis. In Microbiology, James J. Crawford; in Pharmacology, Robert Russell; and in Physiology, Ferrill Purdy, Alan Sexton.

Died: Dr. Max M. Ellis, for many years Chairman of the Department of Physiology and Pharmacology, in Los Angeles.

Research: A two year $25,000 study of providing medical care for indigents in Missouri, financed by the Missouri Health Council, conducted by the University for Research and Social Sciences, under direction of Professor C. E. Lively; P.H.S. grant of $25,000 to Dr. W. A. Sodeman for undergraduate teaching in cardiovascular diseases; $5,000 unrestricted grant from Smith, Kline & French to Department of Medicine; $4,320 P.H.S. grant to Dr. Elmer Bueker for research in cancer transplantation; P.H.S. grant of $12,908 for studies on isolation and characterization of cellular proteins to Dr. Lloyd E. Thomas; $9,460 unrestricted from the National Fund for Medical Education.

Postgraduate Education: Inaugurated in cooperation with M.A.G.P. for series of programs in Columbia for Central Missouri physicians.

Building: New School of Social Work under direction of Prof. Mark Hale established; planning for construction of new 441 bed University Hospital complete; start made on planning for new Medical Sciences building and Nurses Home.

Alumni: St. Louis Alumni banquet at the Statler December 5 . . . Dr. Howard A. Rusk, speaker.

WASHINGTON UNIVERSITY

New Dean: Carl V. Moore, M.D., will assume the post of Dean of Washington University School of Medicine in March 1954. Forty-five years old, Dr. Moore received his M.D. degree from Washington University in 1932, joined the staff in 1938, and has been professor of medicine since 1946. An authority on hematology and nutrition, the new Dean is President of the American Society of Clinical Investigation for the year 1953-54; Chairman of the National Research Council Committee on blood and related problems, the Hematology Study Section of the United States Public Health Service and the Medical Advisory Committee of the St. Louis Red Cross Blood Donor Center. In 1946, he served as President of the Central Society for Clinical Research.

Honor to Dr. Terry: Two lectureships, honoring Robert J. Terry, M.D., Professor Emeritus of Anatomy, Washington University, were delivered December 1 and 2, in St. Louis. The lecture on December 1, by Dr. William L. Strauss, Jr., head of the Laboratory of Physical Anthropology, Johns Hopkins University, was sponsored by the St. Louis Medical Society. The second lecture was delivered by Louis B. Flexner, M.D., Professor of Anatomy, University of Pennsylvania School of Medicine, sponsored by the Washington University Medical Alumni Association.

Dr. Terry joined the faculty following his graduation from the old Missouri Medical College in 1895, and held the position of head of the department of anatomy from 1928, until his retirement from active teaching in 1941. He still maintains a laboratory at Washington University.

50 *and seven*

YEARS TREATING ALCOHOL AND DRUG ADDICTION

In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

Twenty-five years ago experience had bettered the methods. Today with the advantages of collateral medicine, treatment is markedly further improved.

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Others Say

(Mostly from Missourians)

More Progress, More Problems

In our childhood one heard little about relief, at least organized relief. The county poor farm was almost a myth. The country was far from filled up and there was consequently opportunity on every hand. If one failed at one thing he could try another. If there were a depression and wide scale lack of jobs one could get a covered wagon and a team of horses and travel with his family westward to take out a homestead and begin life over tilling the soil. As already remarked we did not have very much organized charity, but we did have tramps who never starved. They bummed their way from town to town —sleeping under bridges and in barns. The railroads pretended to chase them from between box cars but were really glad of an exodus of labor to where it was needed. The tramps wandered through town and made chalk marks that led inevitably to my grandmother's kitchen door just as they did to yours. This was then our charity—as much as was needed. But it was not and did not need to be organized. However, now our country is heavily populated, there are no new lands, opportunities do not abound on all sides, labor has become very specialized and business so intricate that one can't any longer easily turn from failure to something else. Today there is frustration when a father cannot provide for his family. We certainly need what has grown up to fill the gap—the Community Chest.—F. T. H'DOUBLER, M.D., *Greene County Medical Society Bulletin.*

Illness Could Be Cheaper

If every physician practiced strict economy on his hospital patients, ordering only enough drugs to meet the situation, used standard drugs which are cheaper whenever possible and tried to conserve on every possible item, a distinct dent could be made in the hospital costs.

Sure, Blue Cross pays for a lot of these items, but who pays for Blue Cross? The patients! Blue Cross is not a giant giveaway program; it collects money from potential patients in order to pay the costs of actual patients. Perhaps if the physicians would work at it a bit both actual hospital costs and Blue Cross could be held down and our patients would be very happy about the whole thing.—Editorial, G. Wilse Robinson, Jr., M.D., *Jackson County Medical Society Bulletin.*

The "Suspectitioner"

The highest echelon in the detection of diseases is the "diagnostician." The gadfly always about is the "suspectitioner." This "gadfly" has long suspected—and not without a modicum of proof—that in most adults coming to autopsy, there might be found a few typical silicotic nodules in pulmonary tissue in the absence of any occupational exposure to siliceous dust. Such a finding might have no bearing on the cause of death nor upon the health of the autopsy examinee during his life. Contrawise, such a finding could have enormous diagnostic repercussions in the instance of a workman mildly exposed to silica dust fully insufficient to have produced a clinical pneumoconiosis. In fine, the detection of a few silicotic nodules in any individual in itself never justifies the diagnosis by the pathologist of a significant silicosis. . . . Editorial, *Industrial Medicine & Surgery,* Carey P. McCord, M.D.

"You Just Can't Get a Doctor . . ."

Here we go again—public relations—that's the big word in medical circles. The powers that be want people to love us—to think of us as the old family doctor used to be thought of—sportier dress perhaps—bigger car with power brakes—slap happy with the needle—but still Good Old Doc.

One sore point with the public now is their contention that they can't get a doctor when they want him. In the good old days Doc always came—even if it took old Dobbin 6 hours to get there through the snow or over muddy roads. Sometimes there was no doctor for 30 miles around so it might take 10 hours for one to come, but they could always depend on him.

Now there is a better distribution of more doctors, better roads, faster cars, better means of communication, so people expect service a little more quickly—30 minutes at most. If they cannot get immediate attention many people voice their complaint . . . some of these complaints may be justified but it seems to me that what they often mean is they don't get the doctor they want. There are always capable young men just starting their practice, who are ready, willing, and anxious to take calls most any time, yet the calls go to the established men who are well known. What a bitter paradox it must seem to the young man when he reads in a local paper that people are complaining about not being able to get medical service when he hasn't had enough to keep him busy.—Allen I. Herman, M.D., *Buchanan County Medical Society Bulletin.*

An Ounce of Prevention

. . . In spite of modern knowledge, new drugs, improved anesthesia and improved surgical technic, there has been a progressive increase throughout the years of the incidence of venous thrombosis.

. . . Tight abdominal binders and dressings should be avoided and drugs that diminish the cough reflex should be given sparingly.

. . . The clinician will do well to examine the legs daily for tenderness to pressure or dorsiflexion, whether the patient be medical or surgical.

. . . Whether the definitive treatment of phlebothrombosis should be surgical or medical is a matter of personal opinion. Present methods of therapy leave much to be desired. The prophylactic measures mentioned constitute the most logical approach to the problem.—"Phlebothrombosis and Thrombophlebitis in the Aged." *J. American Geriatrics Society,* Frank H. Hodgson, M.D.

IN MEMORIAM

Harris, Harold S., M.D., Troy, a graduate of Washington University School of Medicine, 1925; honor member of the Lincoln-St. Charles County Medical Society; aged 56; died October 23.

McBratney, Emmett W., M.D., St. Louis, a graduate of Washington University School of Medicine, 1903; honor member of the St. Louis Medical Society; aged 78; died October 24.

Aubuchon, William E., M.D., Leadwood, a graduate of the American Medical College, St. Louis, 1909; honor member of the Mineral Area Medical Society; aged 74; died October 28.

Lanzafame, Sare Anthony, M.D., Farmington, a graduate of St. Louis University School of Medicine, 1941; member of the Mineral Area Medical Society; aged 39; died November 1.

Schaaf, Katherine M., M.D., St. Louis, a graduate of Barnes Medical College, St. Louis, 1905; honor member of the St. Louis Medical Society; aged 78; died November 9.

Bennett, C. Edward, M.D., Webster Groves, a graduate of the St. Louis College of Physicians and Surgeons, 1917; member of the St. Louis County Medical Society; aged 60; died November 11.

Schumacher, Cyril W., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1931; member of the St. Louis Medical Society; aged 46; died November 13.

Doyle, Raymond E., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1921; member of the St. Louis Medical Society; aged 58; died November 19.

Teachenor, Frank R., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1911; member of the Jackson County Medical Society; aged 65; died November 28.

INFANT MORTALITY ST. LOUIS STUDY COMMITTEE

A committee to study the infant mortality in the hospitals of St. Louis and St. Louis County has recently been formed. It is a joint organization of the St. Louis Academy of General Practice, the St. Louis Gynecology Society and the St. Louis Pediatric Society. Dr. J. Earl Smith the St. Louis Health Commissioner and Dr. H. R. Domke the St. Louis County Health Commissioner are members of the committee.

Recently published figures of the St. Louis Health Commissioner show that the death rate among infants in St. Louis had risen each year since 1949 and that now it has the highest infant death rate of all the large cities.

It is the expressed purpose of this committee to analyse each infant death in all hospitals of the city and county of St. Louis and by this study to throw considerable light upon the causes of death in this age group. With this information it is hoped that recommendations can be made that will result in a substantial decrease in the infant mortality.

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The Council

The Council met at the Sheraton Hotel, St. Louis, on December 5, 6, 1953, with Victor B. Buhler, M.D., Kansas City, Chairman, presiding. Present were Drs. Buhler; W. F. Francka, Hannibal; Raymond O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; W. S. Sewell, Springfield; J. H. Summers, Lebanon; Frank W. Hall, Cape Girardeau; H. E. Petersen, St. Joseph; E. Royce Bohrer, Jefferson City; Carl F. Vohs, St. Louis; R. E. Schlueter, St. Louis; Henry Allen, St. Louis; James R. Amos, Jefferson City; Victor E. Scherman, St. Louis; A. E. Spelman, Smithville; Thomas Thale, St. Louis; Daniel B. Landau, Hannibal; Paul O. Hagemann, St. Louis; Guy Magness, University City; Messrs. J. W. Foristel, Washington, D. C.; John W. Noble, Kennett; Lemoine Skinner, James Koenig, Raymond McIntyre and T. R. O'Brien, St. Louis.

Veterans Medical Care

Mr. O'Brien announced the appointment by the President of a Committee on Veterans' Medical Care, consisting of W. J. Shaw, M.D., Fayette, Chairman; Ralph Perry, M.D., Kansas City; A. R. Dalton, M.D., and Leo J. Hartnett, M.D., St. Louis, with an additional member to be named from outstate.

Recent Publications

Attention was called to the recent Mirror of Public Opinion in the *Post-Dispatch* using a talk by Dr. Bohrer on rural medical practice; also to the article in the October 30 issue of *Collier's*, "Some Doctors Should Be in Jail," and correspondence between Mr. O'Brien and the editor of *Collier's* was read.

Conference of Presidents

On motion, the usual dues of $75.00 to the Conference of Presidents was voted.

Better Business Bureau

On motion, the usual dues of $100.00 to the Better Business Bureau was voted.

Report of Field Secretary

Mr. McIntyre reported the following meetings and attendance in the last two months: Oct. 5, Nodaway-Atchison-Gentry-Worth Counties; Oct. 6, six counties at Kennett, with 20 in attendance; Oct. 8, Grand River with 21; Oct. 8, Cape Girardeau with 22; Oct. 20, Marion-Ralls-Shelby; Oct. 22, Rolla, with 23; Oct. 28-29, Missouri Academy of General Practice at Jefferson City with 135; Nov. 4, Poplar Bluff with 33; Nov. 5, Clay County Conference with 72; Nov. 12, Harrisonville with 29; Nov. 12, Tenth Councilor District at Cape Girardeau with 39; Nov. 18, Johnson, Henry, Pettis and Saline at Sedalia with 35; Nov. 19, University of Missouri Medical School and Missouri Academy of General Practice at Columbia with 50; Nov. 19, St. Charles-Lincoln with 17; Nov. 19, Mineral Area at Farmington with 18; Nov. 19, Rolla with 20; Nov. 24, Marion-Ralls-Shelby at Hannibal with 31; Nov. 27, Jefferson County at Herculaneum with 10. He pointed out that at most of these meetings there were two scientific speakers and that many were in cooperation with the Missouri Academy of General Practice and that credit was given for attendance.

Mr. McIntyre told of other meetings as follow: School Health Conference in Highland Park, Sept. 26-27; Missouri Health Council in Jefferson City on October 12; Missouri Hospital Association in St. Louis on Nov. 19-20. He called attention to the mass immunization with gamma globulin of 5,000 persons in Moberly on Sept. 17, 18 and 19. In discussion, it was brought out that the Council would be interested in helping Clay County celebrate its 100th anniversary in 1954. Placement of physicians and hospitals were discussed and it was announced that the A.M.A. is to make a check on occupancy of the Hill-Burton Hospitals.

Dr. Amos

Dr. Amos pointed out that percentage of occupancy varied with the size of the hospital and that the demand for beds for chronic diseases is a problem at present. He brought out that the recent hospital licensing law had created some problems and that he was going to ask various organizations to furnish personnel to meet and advise with him and asked that a committee from the Association be named for this purpose. He called attention to a Medical Civil Defense meeting to be held in Jefferson City on Dec. 9. Dr. Amos said that the question still remains of the State Cancer Commission being an advisory body or with power to conduct the Cancer Hospital. He spoke of the relation of the hospital to the University of Missouri Medical School. He announced that a trial run of the use of polio vaccine will be carried out between February and June 1 and asked the cooperation of the Council. In certain counties, children in the second grades will be vaccinated, those in the first and third grades to serve as controls.

On motion of Dr. Summers, it was voted to request the President to appoint a committee to advise with Dr. Amos. On motion of Dr. Bohrer, the Council voted to cooperate in the trial of the new polio vaccine.

A.M.A. Washington Report

Mr. J. W. Foristel, legal consultant in the A.M.A. Washington office, explained that the Washington office has for its main purpose keeping physicians informed. He pointed out that no compulsory health bill had been introduced since 1949 but that in the two year period 1951 and 1952, there were 250 bills introduced in Congress which influenced the practice of medicine, and that in 1953 there were 274 bills, many in the field of social security but still influencing medicine. He pointed out that when any beneficiary cannot be given more in dollars, they may then receive service and that the first service is often health care. He said that it was felt that President Eisenhower wished all persons covered by social security. He said that each additional health service given brought more physicians under the federal payroll. He discussed the situation on service and nonservice connected disability care of veterans and gave the figure of 35,000 service connected disabilities as against 65,000 nonservice cared for per day in veterans' hospitals, and that the average stay for a veteran in a veterans' hospital was 30.4 days as against 7.1 in a private hospital. He said that other important things before Congress are the Bricker resolution concerning treaties and the Jenkins-Keough bills on pension plans.

Mr. Foristel then reviewed the Special Report No. 11

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From where I sit
by Joe Marsh

A Case of "Moostaken" Identity

Slim Smith never had a chance to use his moose call until a trip north this year. Visited him yesterday to see what he'd bagged.

"First day out," he told me, "I picked up a trail. I sounded the call and waited. Then I heard a moose call. Sure enough, something came crashing through the brush. But it was another guy with his moose call. Boy, did I get my finger off the trigger in a hurry!"

My last day there I picked up another trail. And this time I got me a real moose. But you can bet your bottom dollar I took a good look before I did any shooting!"

From where I sit, we could all learn a little from Slim's experience. Most of us are guilty sometime or other of being too quick on the trigger. Like the fellow who would tell me how to practice my profession . . . or even deny me an occasional glass of beer with my dinner. I say that kind of "aim" is way off!

Joe Marsh

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on "Medical and Health Budgets of Federal Agencies" which was issued by the Washington Office on October 21, giving more detail than was in the report. Copies of the report were given to the Council.

Dr. Bohrer Greetings

It was moved and voted that a telegram be sent Dr. E. C. Bohrer, President, who was absent from the meeting because of illness.

H.B. 82

On motion of Dr. Muether, it was voted that the Council disapprove of M.S.M.A. going under the new legislation on nonprofit organizations, H.B. 82.

Budget

The following budget was presented by Dr. Vohs, Chairman of the Budget Committee, and on his motion, seconded by Dr. Sewell, was adopted.

Budget for 1954

Salaries	$ 38,750.00
Journal Expense	27,000.00
Postage, printing and stationery	4,500.00
Travel—Executive Secretary	1,300.00
Travel—Field Secretary	2,800.00
Telephone and telegraph	1,600.00
Office rent and light	3,000.00
Meetings and committee expense	17,700.00
Defense	500.00
Scientific and Postgraduate Work	1,000.00
Woman's Auxiliary	1,000.00
Public Relations	7,000.00
Insurance Annuity	2,780.00
Miscellaneous General expense	3,000.00
Furniture and Fixtures	1,000.00
Social Security Tax	640.00
Legal Expense	1,200.00
Total	$114,770.00

Advisory Committee to Selective Service

Dr. Allen said there was a need for approximately 5,500 physicians annually which by enlistments will be cut to 5,000. He said that a directive to all hospitals was that men should be allowed one year of internship only. He said that the National Advisory Committee does not want the draft act to continue after July 1, 1955. He said that he would contact Councilors in the spring concerning available men in their districts.

Blue Cross and Blue Shield

Dr. Vohs reviewed Blue Cross and Blue Shield at the present time, presenting some of the problems, particularly the recent handling of the packing industry group and the methods being used to solve them. He said that there will be a meeting of Blue Shield plans in Chicago in January which may furnish more information.

Resolutions From Greene County

Two resolutions from the Greene County Medical Society were read, one resolving that Blue Shield should handle ancillary services, the other that Blue Cross should not handle these services. On motion the resolutions were accepted and instruction was given to refer them as directed in the resolutions.

Improvement of Patient Care

Dr. Stauffacher reported for the standing committee on Hospitals and Professional Relations, regarding the Missouri Conference for the Improvement of Patient Care, stating that nurses were desiring a clearer definition of their duties but asking no definite action of the Council at present. On motion of Dr. Francka, the report was accepted and the committee instructed to work out the specific questions of the Conference and report further.

County Hospital Staffs

The means of handling staffs in various county hospitals in the state was discussed briefly. However, two specific hospitals that had asked advice were discussed fully and it was pointed out that the House of Delegates had stated clearly that the Association would take part only in an advisory capacity.

Committee on Rural Medical Service

Dr. Spelman reported for the standing Committee on Rural Health pointing out the need of physician leadership in community health projects, the advisability of the hyphenation of small county medical societies, the need for health councils with physician participation, contact with the University of Missouri Medical School urging the training of doctors for rural areas, the importance of lectures to interns and the placement service for physicians. He reviewed the survey of indigent medical care to be made in twenty-seven counties of the state by Dr. Liveley of the University of Missouri under the sponsorship of the Missouri Health Council, and urged the cooperation of the Councilors in obtaining cooperation from physicians in these counties. On motion of Dr. Muether, the report was accepted and Councilors urged to cooperate in the survey.

Annual Session

Dr. Hagemann gave information on the scientific program for the annual session, saying that there will be eleven out of state guest speakers, that sectional meetings will be held as well as round table sessions. He said that on Tuesday afternoon of the meeting, wet clinics will be presented in hospitals in the city.

Committee on Mental Health

Dr. Thale submitted the report of the Committee on Mental Health as follows:

"The Committee on Mental Health of the Missouri State Medical Association has considered the legal procedures involving H.B. No. 355, pending before the Missouri Supreme Court. The Committee is of the opinion that the legality of the act, in whole or in part, is outside the province of the Committee, however, mental health and the well being of citizens of our State afflicted with this malady definitely are of concern to the Committee and to the Association; therefore, the Committee recommends that a panel of members of the Committee or of other members of the Association be provided to serve in the capacity of 'Amicus Curiae' relative to the pending Supreme Court proceedings involving H.B. No. 355; and that the members selected will provide any technical or scientific information to the Court regarding mental health in Missouri which may be desired; and that the members selected will provide such information without expense to the Court, or to any of the principals involved, or to the Association itself.

"The State Senate appointed a Committee to study the needs of the State Mental Hospitals composed of the following: Senators Spradling, Cape Girardeau; Noble, Kennett; Crain, St. Louis County; Linneman, St. Charles.

"The Committee will meet in St. Louis, December 10, 11 and 12. It was agreed that a letter should be written to the Senate Committee offering the services of the Committee on Mental Health of the Missouri State Medical Association to assist the Senate Committee in its effort to improve the care and treatment of mentally sick persons in Missouri.

"Dr. Henry Guhleman, Director of the Bureau of Mental Health of the State Division of Health told the Committee of some of the problems of the Division of Health and explained how Federal Funds had been allocated to assist in the development of Child Guidance Clinics.

"It was agreed that a letter be written to Dr. James R. Amos, Director of Health, State of Missouri, offering the services of the Committee in an advisory capacity to the Bureau of Mental Health."

On proper motion, the report was accepted with commendation.

Committee on Infant Care

Dr. Landau reported on the work of the Committee on Infant Care, including the attendance at the fourth National Conference of School Health, and made the following recommendations:

1. That school health become an active continuous consideration of the Missouri State Medical Association.
2. That the province of considering school health problems be designated to a suitable Association committee.
3. That such Committee be either the Infant Care Committee or a new standing committee be created for the charge.
   a. If the Infant Care Committee is charged with this added function it is suggested that it be expanded, to possibly ten members.
   b. Your present Infant Care Committee favors an expansion with the added responsibilities over the formation of a new School Health Committee.
4. That the State Medical Association take the lead in the near future in seeking a top level meeting with the Missouri Division of Health, the State Department of Education and the Missouri State Dental Association to discuss over-all school health problems and to suggest areas and means of cooperative action.

On motion of Dr. Petersen, the report was accepted and instructions that these recommendations be referred to the Committee on Constitution and By-Laws for presentation to the House of Delegates.

Committee on Public Policy and Public Relations

Dr. Francka called attention to the composition of the Committee on Public Policy and Public Relations and suggested that the committee might be larger, including one member from each Councilor District, this person not to be the Councilor, and that the duties of the committee be increased and not refer so strictly to public relations. Following discussion, on motion of Dr. Muether, it was voted to refer this to the Committee on Constitution and By-Laws for their consideration and possible presentation to the House of Delegates.

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CONTRIBUTIONS

R. O. Muether, M.D., Editor of Scientific Material

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Guest Editorial

Physician-Moralist Cooperation

Rev. Gerald Kelly, S.J.
Ethics Consultant, Catholic Hospital Association

The practice of medicine touches the science of ethics under many aspects. For instance, in the guest editorial for February, Dr. George F. Lull stressed the physician's duty to place the welfare of the patient before any financial consideration, a duty which pertains not only to the physician-patient relationship but also to primary purpose of the medical profession. Then there are the professional relationships of physicians to one another, to their respective medical organizations and to the general welfare. These relationships imply duties; hence they touch upon ethics, which is the science of rights and duties.

Another aspect of the physician-patient relationship which clearly and, one might say, especially concerns ethics is the mutilating procedure: the operation or treatment which in some way destroys or diminishes the integrity of the human body. The ethical status of such procedures seems to be more taken for granted than explicitly considered in the average professional journal. This is not surprising because, when the medical picture is clear, the instinctive judgment of the good physician will choose good morality precisely because it chooses good medicine.

But in cases in which the medical picture itself is not clear, when a procedure is somewhat new, when its effects include pros and cons, instinctive judgment is scarcely enough. The working out of these cases on an ethical basis requires close reasoning, a type of reasoning with which only the expert in ethics is familiar. Yet, the ethician—or, as I should prefer to designate him, the moralist—is not sufficient unto himself. He is an expert in ethics, not in medicine. An adequate solution to these difficult cases is had only through close cooperation between physician and moralist. The physician furnishes the medical data, with an expert medical appraisal; and to this data, properly appraised under its medical aspect, the moralist applies the principles of ethics.

Through many years the present writer has enjoyed the harmonious cooperation of physicians, Catholic and non-Catholic alike, in solving problems of medical ethics. Accounts of some of these problems might prove interesting, as well as informative. Perhaps they can be presented at some future time.

Of This and That

Mark M. Marks, M.D.

An elderly patient once told me that now having no need to hurry, she found time to recall the things she missed in her youth. So it begins with me. This festive season brings a memory of my first acquaintance with the Christmas Spirit. As a 7 year old immigrant without knowledge of the language, the manifold mysteries and wonders of the new world suddenly multiplied with sounds of merriment, tinsel and lights. Questioning a playmate about it, he patiently explained something concerning an incredible, jolly man dressed in red who filled the stockings of all good children with wondrous gifts. He promised to tell all later.

There was some difficulty in explaining to my parents this sudden whim to hanging my hose over the back of a chair (being chimneyless) on the specified night. The first to arise the next morning, with high hopes to prove the veracity of my small friend, I found my stocking still hanging empty and stiff with frost. For some years after I believed that Santa was partial to certain people—namely the native-born.

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SCHERING

Missouri Academy of General Practice

William J. Shaw, M.D.

The Missouri general practitioners were well represented among the more than 300 Missouri physicians who attended the Seventh Annual Clinical Session of the American Medical Association in St. Louis, December 1-4, 1953.

The program of the opening session included a speech of welcome by Dr. E. Claude Bohrer, President of the Missouri State Medical Association, and a director of the Missouri Academy of General Practice. The House of Delegates seated Dr. Joseph C. Peden, St. Louis, alternate for Dr. Robert E. Schleuter, and general practitioners Paul Baldwin, Arthur S. Bristow, and Rolla B. Wray. The Subcommittee on Hospitality and Information consisted of Dr. Charles E. Martin, President of the St. Louis Academy of General Practice, and twenty-four members recognized for their past and present activity in that organization. Dr. R. C. McElvain, St. Louis, presided at a meeting on "Arthritis" and spoke at a question and answer conference on "Diabetes."

From the opening of the scientific program by Dr. Wm. B. Bean, Iowa City, with an excellent lecture, "Opportunities for Research in General Practice," until the closing session, "What's New in Treatment," the scientific program was, as stated by Dr. George F. Lull, "directed toward the general practitioner, presenting the latest developments in curative and preventive medicine and designed primarily as a postgraduate course for the general practitioners of the nation."

Confirmation of the success of this annual session may be obtained from any general practitioner who attended. A few observed at different times and in different places included Drs. Joseph A. Conrad and Donald M. Dowell, Chillicothe; Thomas L. Dwyer, Mexico; R. W. Kennedy, Marshall; Harry A. Klein, St. Louis; John F. Pearl, St. Clair; M. B. Casebolt, Kansas City; Ed. D. Campbell, Cape Girardeau; Joseph C. Creech, Troy; N. J. Eversoll, St. Louis; A. L. Hansen, Butler; Eugene W. Hall, Ferguson; John J. Killion, Portageville; Wm. R. Richardson, Union; Paul E. Rutledge, Kirkwood; John F. Rutledge, Crystal City; Benjamin G. Strehlman, Union, and Joe A. Zimmerman, Kennett.

The consistent attendance of present day general practitioners at medical meetings and the interest shown by them in continuing postgraduate instruction is significant of the change in the quality of general practice. It is insurance against general practitioner relegation to the role of pill roller and is indicative of their continued ability to qualify for a deserved level of medical responsibility.

Crossroads Comment

Peter V. Siegel, M.D.

Howdy Unc':

Seems like of late every time I pick up a magazine I can read something about what's wrong with my profession. I already know why some of us had oughta be in the calaboose and why patients hate us. Almost gettin so as I feel sorta conspicuous walkin down the street. Reckon that's the sort of stuff that sells magazines and since I ain't heard tell of any defamation of character suits the like will keep comin'.

Must add more weight when the author can quote some of our union officials, or a perfessor, or someone with a bunch of them alphabets 'hind his name. Like grandpap usta say "they must not be anyone else tootin' their horn so they just blow loud and long themselves." Ya know I shouldn't be a gripin too much cause I've been sittin back with a lot of the rest and letting them run the show. It's an awful good excuse to say I'm too busy practicing medicine but I don't reckon it's a good enough one.

Not too fur back the Editor of a large County Medical Society Bulletin editorilized as follows as regards to electing a president: "It seems to us that the office of president of our society does not call so much for a dynamic young go-getter as it does for some capable and personable member of our group whom we wish to honor."

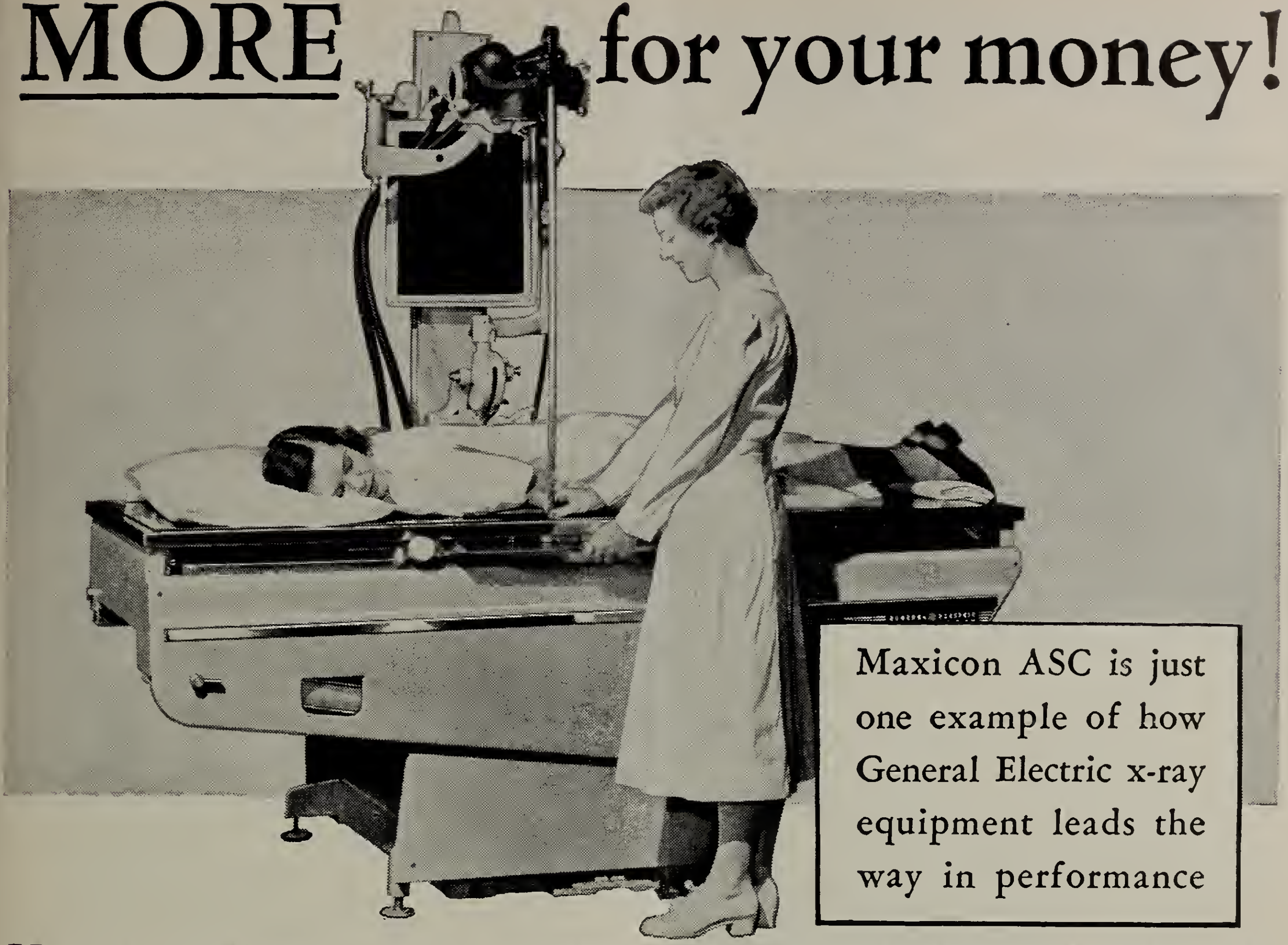
Just go back and read that again, Uncle Teddy. He wants to make the office of president—the head of his society—the man who is supposed to lead the profession for a year—an honorary post that is to be handed on from year to year!

It's high time we get a lead dog who will grab the bull by the horns and get some of our problems solved. We might even find someone who would consider our patients' welfare first and then a profession with a good name would certainly follow.

I had better stop writin' and get to whittelin' 'fore someone accuses me of gettin' dynamic!

Yours for some changing,
Pete

MORE for your money!



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FEATURE	MAXICON ASC	UNIT X	UNIT Y	UNIT Z
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Variable speed table angulation	YES	NO	NO	NO
Radiation-protective table panels	YES	NO	NO	NO
18-in. focal-spot to table-top distance for fluoroscopy	YES	NO	NO	YES
Counterbalanced tube stand, providing adjustable focal-film distances up to 40 in.	YES	NO	NO	NO
Signal-light centering system for Bucky radiography	YES	NO	NO	NO
Provision for cross-table radiography	YES	NO	NO	NO
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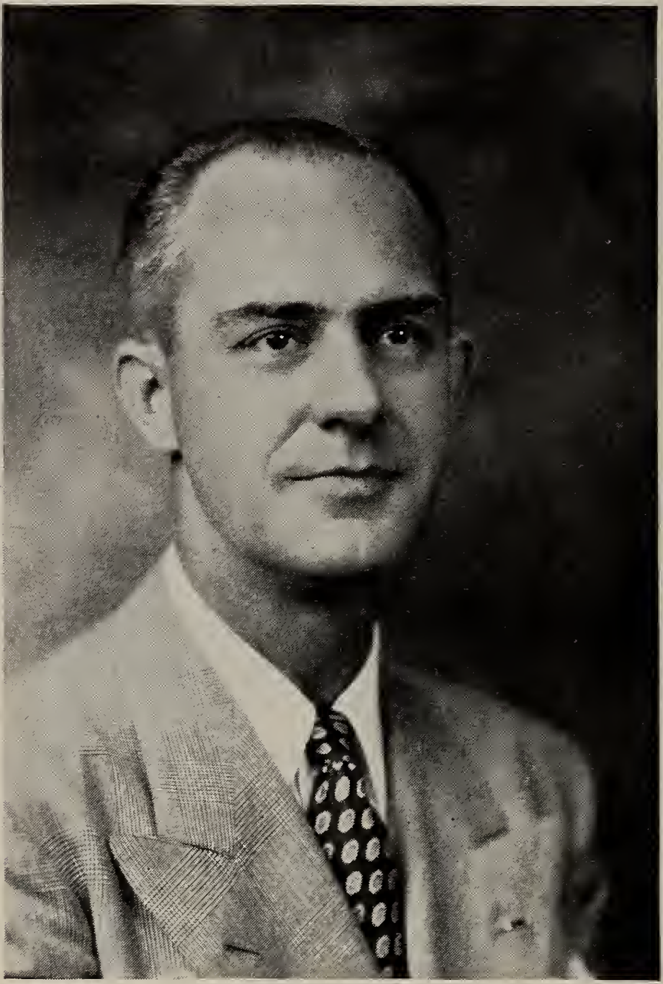
"Scouting With the Men of Tomorrow"

An interest in Boy Scouts was first demonstrated by Durward G. Hall, M.D., Springfield, at the age of 10. He was then a member of the Springfield Boys Band, directed by the late R. Ritchie Robertson, whose son directs the Wichita Symphony. When this band was absorbed by the Boy Scouts, young Durward automatically became a tenderfoot, and in two months a first class Scout. Because he was large for his age, and distinguished as the youngest Eagle Scout in America, he was made the standard bearer, although he disclaims much credit as a "trumpet tooter."


Durward G. Hall, M.D.

Many trips were made throughout the midwest, including St. Louis, Kansas City, Chicago and, of course, the Boy Scout summer camps. These safaris impressed young Hall to a degree that has persisted through all these years. As he grew older, he became the Activities Director of the local Council Camp for eleven summers. He met his wife (Bettie) in these surroundings, and married her in the camp's natural Outdoor Church. Obviously, this has endeared Boy Scout and Campfire Girl activities to both Dr. and Mrs. Hall. During vacation from Rush Medical School, Dr. Hall continued for two more summers as Activity Director.

Dr. Hall's services with the Council were interrupted by World War II, but on his return he was placed on the Council Operating Committee, first as advancement chairman, and later as camping and activities chairman.

Two years ago he was elected President of the Ozarks Empire Area Council of Boy Scouts; he now serves as a member of Region VIII Executive Committee. This area, "the great central west," is comprised of Colorado, Wyoming, Kansas, Nebraska, Iowa and Missouri. He served as program chairman for the last Region VIII meeting, and is now chairman of its subcommittee, "Report to the Nation." One unsatisfied lifetime ambition was fulfilled this summer when he attended the Scouting Jamboree in California.

Dr. Hall has attended five courses, with other adult leaders in the Scout movement, at the Philmont Boy Scout Ranch, near Cimarron, New Mexico. This 137,000 acre ranch was given to the Boy Scouts by Mr. Waite Phillips, with the Philtower Building in Tulsa as an endowment to assure financial support of the ranch. Durward is the No. 1 Nimrod Club member who contributes to the financial support of the ranch's private conservation program, which assures a supply of deer, bear, turkey and other live game.

On his last trek, Dr. Hall took his wife and daughter, and explains, "true Scouting becomes a family project, gets into the blood, and is more than a hobby."

When asked about his underlying philosophy concerning Scouting, Dr. Hall's reply is worth rereading: "The experiences, plus the present day need for assurance of making the men of tomorrow 'come right,' serves both as a feeling of indebtedness, and one of stimulation for my continued interest as an active Scouter."

We congratulate Dr. Hall on his hobby, which is "more than a hobby."

(We will appreciate hearing from other members with interesting or unusual hobbies. V. T. W.)

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Our Auxiliary

Mrs. C. Alex (Helen) McBurney, *President*

How many of you know that our physician husbands who are members of the American Medical Association have a nine million dollar investment in the A.M.A. headquarters building, which is the pivotal point of all its activity, at 535 North Dearborn Street, Chicago 10, Illinois?

Within this nine story building nearly 1,000 employees carry on the work of the various councils, committees, bureaus and departments whose activities are determined by the A.M.A.'s physician-members. Its nine floors house, not only offices and meeting rooms, but a complete printing plant, a fully equipped chemical laboratory, an extensive medical library, a radio recording studio, a film projection room, an auditorium and a privately owned cafeteria.

This November when your president and president-elect, Mrs. W. E. Martin, Odessa, attended the Conference in Chicago for state presidents and presidents-elect, the last day of the meeting was devoted to touring the A.M.A. building. Following the tour, we were luncheon guests of the A.M.A.

It is possible, at any time, for a member to be taken on a tour of the building. It is well worth your time and your president urges you to look into and know more about your nine million dollar investment. With more than 130,000 physician-members, the A.M.A. represents the American medical profession.

Capsule Clinics

Irving A. Wien, M.D.

- Approximately 4 per cent of patients having common duct stones do not have stones in their gallbladders, which offers evidence of their formation within the duct. Cattell, R. B.: Surgical Practice of the Lahey Clinic, W. B. Saunders Co., 1951.

- The low mortality and morbidity associated with the average cholecystectomy have resulted in a tendency to regard this operative procedure rather lightly; however, one continues to see one or two new patients a week at the Lahey Clinic sent because of stricture of the common duct resulting from injury at the time of the original cholecystectomy. Colcock, B. P.: Surgical Practice of the Lahey Clinic, W. B. Saunders Co., 1951.

- The liver is the principal site of formation of the protein, fibrinogen. Impairment of hepatic function affecting fibrinogen formation is reflected in reversal of the normal albumin-globulin ratio of the serum protein. Mason, R. L., and Zintel, H. A.: Preoperative and Postoperative Treatment, W. B. Saunders Co., 1947.

- Bile is the external secretion of the liver and under normal conditions amounts to about 600 to 700 cubic centimeters daily. Mason, R. L., and Zintel, H. A.: Preoperative and Postoperative Treatment, W. B. Saunders Co., 1947.

- The word "Hyphex" is a contraction of hydrazinophthalazine and hexamethonium. Hexamethonium chloride blocks the sympathetic nervous system at the sympathetic ganglia, while hydrazinothalazine inactivates many pressor substances in the blood which may be of interest in hypertension. Schroeder, H. A., and Morrow, J. D.: Med. Clin. N. America **37** (July) 1953.

- In bronchiectasis the superimposed infection may be controlled or improved, but the basic pathology of bronchial dilatation is irreversible. Surgical removal of all of the diseased lung offers the only hope for complete cure. Burnett, W. E., et al.: Med. Clin. N. America **37** (July) 1953.

- Considering the fact that the x-ray examination of the small intestine is the only method of studying the small bowel in detail short of surgical exploration, it is not as widely used or requested as frequently as it probably should be. Hunter, C. H.: J. Nat. Med. A. **45** (July) 1953.

- Lumbar sympathetic ganglionectomies in the treatment of obliterative arterial disease were of no value. Smith, E. B.: J. Nat. Med. A. **45** (July) 1953.

- Tribromoethanol with amylene hydrate (avertin) is unsatisfactory for general use as an intravenous analgesic or basal anesthetic agent. Dwyer, C. S., et al.: Superficial Phlebitis, Anesthesiol. **14** (May) 1953.

- A most important factor in correct administration of an anesthetic is the clinical judgment used to select the particular agent and method for a specific patient under specific circumstances. Cutright, E. G.: Anesthesiol. **14** (May) 1953.

50 *and seven*

YEARS TREATING ALCOHOL AND DRUG ADDICTION

In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

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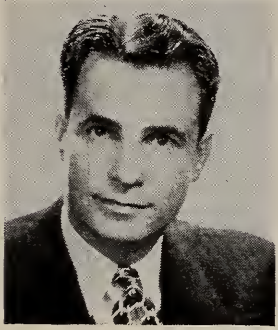
Ralph Emerson Duncan, M.D., Medical Director.

Missouri Medicine in Review

Leo H. Pollock, M.D.

FEBRUARY 1914



Dean of the Episcopal Cathedral of SS. Peter and Paul, Chicago, announced that no persons would be married by any clergyman at the cathedral except on the presentation of a certificate signed by a reputable physician, showing that the contracting parties are physically and mentally normal, and have neither an incurable nor communicable disease. . . . It would be an exceedingly difficult and technical matter to determine who are the fit and the unfit. The constitutionality of such a law may be questioned. . . . Diphtheria in the St. Louis city jail has assumed epidemic proportions and the jail has been quarrantined. . . . Smallpox has caused the closing of one of the Kansas City public schools. . . . Sanitary conditions at the House of Detention in St. Louis prompted Delegate Nathan Hall to request the board of public improvements to investigate; "The schoolroom is remindful of the Tower of London and is as unfit for education as a cesspool is for a banquet room" according to Hall.

FEBRUARY 1929

The American Association for the Study of Goiter will hold its next annual meeting at Dayton, Ohio, March 25-27. . . . Dr. R. B. H. Gradwohl, St. Louis, sailed for Germany December 12 on the *SS George Washington* to spend six weeks in the laboratory of Professor Schilling, of the University of Berlin. Dr. Gradwohl's visit is in connection with the translation of Professor Schilling's new textbook on hematology which will be published by C. V. Mosby Co. Dr. Gradwohl will study Professor Schilling's new method of differential blood counting in diagnosis and prognosis. . . . Dr. Fred Bailey, St. Louis, was elected one of the vice presidents of the Southern Surgical Association at its Forty-first Annual Meeting held in White Sulphur Springs, West Virginia. Dr. Ellis Fischel, St. Louis, was elected to membership at the same meeting.

FEBRUARY 1944

The 87th Annual Session of the M.S.M.A. will be held April 23-25 in Kansas City. Luncheon and banquet meetings will be held at the Muehlebach Hotel. . . . Dr. Vincent T. Williams, Kansas City, was presented a merit certificate and a gold key in recognition of his service as editor of the *Jackson County Medical Society Bulletin*. . . . Dr. Evarts A. Graham, St. Louis, has been designated Charles Mickle Fellow for 1943 by the University of Toronto. The award was made in recognition of his discovery of a method of testing gallbladder function and development of a new diagnosis and treatment of cancer of the lung. . . . The following members were accepted into fellowship in the American College of Surgeons in 1943: from St. Louis, Doctors E. Humber Burford, Thomas H. Burford, Bertrand D. Coughlin, Robert Elman, John J. Hennelly, Edward J. Jordan, Joseph M. Keller, Frank McDowell, John D. Shea, Dominic J. Verda and David O. Weiner; Henry Durst, Fulton; Ronald F. Elkins, Springfield, and Enoch H. Gentry, Kansas City.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

A patient came to my office complaining that she was anemic. On asking her why she thought she was anemic she replied, "Because my piles don't bleed anymore."

Which reminds me that, the Chinese word for constipation is said to be Hung Chow.

Jimmy Melton says the trouble with most chlorophyll jokes is that they smell.

A young woman came to our local laboratory as a blood donor. "Do you know your type?" asked the technician. "Oh yes." came the reply, "I'm the sultry type."

Dr. Sewell stated last week that the recent snakes in Springfield publicity was not the D.T. fantasy of some alcoholic reporter. It seems there is a local importer of reptiles. These snakes came in drugged and encased in mud. The colored porter of the Reptile Emporium was washing off the mud packs with a hose when one of the snakes raised up its head. The result was the porter dropped the hose and ran—and so did the snakes it seems.

Old Doc Holtzen was never at loss for a reply to his patients questions. When asked by one what artery had ruptured in a case of apoplexy he replied in all seriousness. "The ascending branch of the recurrent paregoric."

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*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

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President's Comments

"Plan Now to Attend 1954 Annual Session M.S.M.A., St. Louis, April 4, 5, 6, 7" is the streamer on the cover of this issue of MISSOURI MEDICINE, and I hope members are making arrangements to attend the session.

It is planned to publish the entire program in the March issue but some of the program is given here to emphasize that it will be an excellent meeting, the Committee on Scientific and Postgraduate Medicine presenting a varied and instructive session.

Speakers from out of the state and their subjects are:

Max Miller, M.D., Cleveland, "Renal Complications in Diabetes."

Conrad G. Collins, M.D., New Orleans, "Toxemias of Pregnancy."

Alfred M. Large, M.D., Detroit, "Problems in Gallbladder Surgery."

W. A. Altemeier, M.D., Cincinnati, "The Use of Antibiotics in Surgery."

M. Edward Davis, M.D., Chicago, "Studies of Estrogen Therapy in Pregnancy."

Gilbert B. Forbes, M.D., Rochester, New York, "Febrile Convulsions in Childhood."

Rudolf J. Noer, M.D., Louisville, "Diverticulitis."

Henry H. Turner, M.D., Oklahoma City, "Endocrine Problems of Childhood."

John C. MacQueen, M.D., Iowa City, "The Present Status of Care of Poliomyelitis."

J. Garrott Allen, M.D., Chicago, "Problems in Blood Preservation."

Don P. Morris, M.D., Champaign, "The Differential Diagnosis of Psychogenic Symptoms."

In addition, a number of outstanding physicians from the state will present papers.

The program has been planned with sections on "Obstetrics," "Pediatrics," "Medicine" and "Surgery," from 10:30 a.m. to noon on Monday and Tuesday. Round table luncheons will be held on both of these days.

The Tuesday afternoon session will be devoted to wet clinics held at the Desloge Auditorium, St. Louis University School of Medicine, and the Wohl Auditorium, Washington University School of Medicine. Subjects to be covered in these wet clinics are: "Collagen Disease," "Infectious Hepatitis," "Peripheral Arterial Disease," "Chronic Ulcerative Disease of the Lower Extremity," "The Medical Treatment of Hypertension" and "Results of Therapy With Radio-active Colloidal Gold in Pelvic Carcinoma." Transportation to the clinics will be made available.

The Annual Session has been arranged so that undivided attention may be given to each portion of the meeting. The House of Delegates will meet on Sunday morning and the reference committees will meet that afternoon, not interfering with the scientific session on Monday morning. Following the Monday afternoon session of the House, any reference committees needing to meet will do so that evening, again not conflicting with the Tuesday morning scientific session.

"Plan Now to Attend 1954 Annual Session M.S.M.A., St. Louis, April 4, 5, 6, 7."

E. CLAUDE BOHRER, M.D.

Progress Notes of Prepayment Plans

(St. Louis Blue Cross-Blue Shield)

Emphasis on the importance of getting the facts before buying health protection is stressed in an article, "The Truth About Health Insurance," in the December, 1953 *Changing Times,* the Kiplinger Magazine.

The authors recommend that the reader get complete information on what the protection provides before purchasing health insurance. It suggests that they "ask their doctor."

"First, have hospitalization," the article states and "If possible belong to your local Blue Cross group hospitalization plan."

"Second, have surgical coverage." "Medical society plans, including Blue Shield plans, are the counterpart of the Blue Cross hospital plans. They are sponsored by groups of physicians and are all run on a nonprofit basis."

Your patients and friends look to you for the facts on many subjects, none more important than the type of health protection they should have for themselves and their families. Here are some facts about Blue Cross and Blue Shield which you may want to pass along to them: Nearly 7,000,000 Americans used Blue Cross benefits in 1953. In 1952 the number was 6,295,995. More than 45,000,000 have this protection. Blue Shield experience is comparable. More than 28,000,000 have this added protection and in the St. Louis area alone Blue Shield members saved more than $3,000,000 in medical bills last year.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 February, 1954 Number 2

Surgical Complications of Pregnancy

JOSEPH L. JOHNSTON, M.D., *Springfield*

Surgical complications of pregnancy are fortunately uncommon. They are, however, exceedingly important in the individual case when present, the morbidity and mortality being much greater than in the nonpregnant. Since nausea, vomiting, heart burn, constipation and abdominal discomfort are common in many normal pregnancies, one is likely to overlook important pathologic conditions and universally assign these symptoms to pregnancy.

Emergency operations must be performed in pregnant women just as in nonpregnant ones. Not only is this true, but pregnancy predisposes to some such as hemorrhoids, varicose veins, gallbladder disease, twisted ovarian cysts and degeneration of myomas. Early in pregnancy the gravid uterus does not interfere with abdominal procedures, but near term the enlarged uterus may be most troublesome. In some cases the uterus must be emptied, preferably from below, before abdominal surgery can be performed properly.

Fortunately, most obstetric patients are relatively young and healthy so that by careful surgical technic, improved anesthesia, better preoperative and postoperative care, the use of blood, and antibiotics, the results following surgery during pregnancy are comparatively safe. However, purely elective surgery during pregnancy should never be done as unforeseen complications are possible.

Abdominal surgical complications in pregnancy may be genital or extragenital in type. This review includes only the extragenital abdominal surgical complications found in 12,041 pregnancies of our private patients from 1939 to 1953. Only fifteen extragenital abdominal surgical complications were found in this series of cases. Acute appendicitis occurred in eight cases, intestinal obstruction in five cases and peptic ulcer in two cases.

In previous case reports by Baer, Reis and Arens,[1] Cosgrove,[2] Norton and Connell,[3] Meiling[4] and Priest,[5] the incidence of appendicitis in pregnancy varies from 1 to 3 for every 10,000 births. The most common surgical complication encountered in this series was acute appendicitis which occurred in eight cases: one case at 12 weeks gestation, five cases between 24 to 26 weeks gestation, one case at 37 weeks gestation, and one case at 11 days postpartum, or an incidence of one in every 1,500 pregnancies. Three cases continued on to full term following appendectomy. Four cases went into labor within forty-eight hours after surgery, with one surviving baby. Pathologic report was acute suppurative appendicitis in seven of these cases, and a normal appendix in one case. There was no maternal mortality in this series, but a fetal mortality of 37.5 per cent. Only one normal appendix was removed, and that was in a patient with a history of several previous attacks of appendicitis.

Any or all of the classical symptoms and signs of appendicitis were present. All cases presented the typical syndrome of generalized abdominal pain accompanied by nausea, vomiting and localization of pain in the right lower quadrant. Definite muscular rigidity was present in four cases, but rebound tenderness was present in all eight cases. After the twenty-fourth week the pain, tenderness, rebound tenderness and muscular rigidity extended upward progressively and into the right flank. A past history of appendicitis was present in four cases. The white count ranged from 10,900 to 30,750 with a polymorphonuclear count ranging from 81 to 95 per cent, both usually approximating the so-called physiologic leukocytosis of pregnancy.

The gross and microscopic pathologic findings, laboratory data, temperature chart, duration of the disease or the period of gestation did not explain why in three of these patients the pregnancy was retained, in four cases the fetus was expelled. However, the four cases that went into labor within forty-eight hours after appendectomy did appear more acutely ill, and had a definite acceleration of the pulse rate in relation to the fever. It is my impression that the type and virulence of the invading organism with the accompanying increased systemic toxemia in the patient determines if the pregnancy is retained. The proximity of the appendix to the uterus and the amount of peritoneal irritation are probable factors.

I have not seen a case of acute suppurative appendicitis that did not start with generalized abdominal pain, nausea or vomiting and localization of pain in the right lower abdomen. Rebound tenderness was a more dependable physical finding than muscular rigidity. Symptoms of mechanical obstruction of the appendix by fecaliths or adhesions may start with pain in the right lower quadrant. However, pain beginning in the right lower quadrant should have careful differential diagnostic consideration before a diagnosis of acute appendicitis is made. Pressure pains are common in the right lower quadrant during pregnancy. They are usually short-lived and can be relieved by uterine support, changes in posture, or by lying down with the hips elevated. Pyelitis is another common cause of right lower quadrant pain. Pyelitis usually produces a higher fever, chills, dysuria, urgency, costovertebral angle tenderness and pus cells in the catherized urine. In addition to these, the differential diagnosis must include salpingitis, ectopic pregnancy, abortion, ovarian cyst, ureteral calculus, diverticulitis, mesenteric adenitis, intestinal obstruction and gallbladder disease.

If appendicitis cannot be ruled out after careful differential diagnostic consideration, a laparotomy is certainly in order. The removal of a normal appendix is far better surgery than removal of a ruptured appendix. Warfield[6] points out that the mortality of acute appendicitis is the mortality of delay in treatment and, if appendicitis goes on to rupture, it will be followed by diffuse spreading peritonitis with little or no tendency to localize or form an abscess. McCarty[7] states that occasionally a normal appendix may be removed but that mothers do not die, nor are babies lost as a result of a careful and uncomplicated laparotomy.

The treatment of acute appendicitis is always surgical, regardless of the state of pregnancy. A gridiron type incision placed directly over the point of maximum tenderness is recommended to avoid trauma and better preserve the strength of the abdominal wall. At operation a minimum of manipulation is wise, but I doubt if this is ever a factor in abortion following appendectomy. Stilbestrol 100 mg., and progesterone 25 mg. daily, may be given before and after operation. The rationale of this therapy is questionable. Morphine should be used generously for the first two or three days after operation.

The reported incidence of obstruction of the bowel during pregnancy varies from 1 in 7,000 to 1 in 66,000 pregnancies.[8] Intestinal obstruction requiring surgery occurred in five cases in this series from 20 to 39 weeks gestation, or an incidence of one case in 2,400 pregnancies. The same etiologic factors are responsible for obstruction as in the nonpregnant: postoperative adhesions, volvulus, congenital defects in the mesentery or broad ligament, carcinoma of the bowel, strangulated hernia and adhesions from pelvic inflammatory disease or endometriosis. The etiologic factor in all our cases was adhesions from previous surgery. The pregnancy was not molested in four cases. The fifth case was a primipara at 39 weeks gestation, and a cesarean section was performed at the time of operation. Maternal death occurred in two cases, one resulting from peritonitis and the second from massive atelectasis and pneumonia, or a maternal mortality of 40 per cent.

Crampy abdominal pain, followed by nausea, vomiting and distension was present in all five cases. Radiographs of the abdomen showed some distension of the small intestine in four cases. The white count and polymorphonuclear count approximated the leukocytosis of pregnancy.

Intestinal obstruction is a serious complication of pregnancy because of the nature of the disease, and only too often as a result of delay in diagnosis. The latter is due to the confusion of the symptoms with factors operating not infrequently in normal pregnancy. Constipation, nausea, vomiting and varying degrees of abdominal pain and abdominal distension are sometimes difficult to interpret. Careful inquiry into the details of these symptoms should point one toward a correct diagnosis. The site and duration of the pain are important. A history of previous surgery, especially pelvic surgery, is usually present. Paroxysmal colicky pain associated with intervals of relative comfort, a tympanitic percussion note with rushes of high pitched peristalsis, and a metallic tinkle, are helpful guides. The x-ray may show distended bowel loops and fluid levels, but does not rule out obstruction if negative.

The treatment of simple intestinal obstruction is not an immediate operative emergency. But when there is interference with the mesenteric blood supply of the intestines, surgery should be done without delay. When there is a rapidly increasing pulse rate and a decrease in the blood pressure in a patient who looks "hard hit," the possibility of strangulation is great. When this is associated with severe pain, evidence of peritoneal irritation and a localized tender mass, the diagnosis is almost assured. Delay in diagnosis and treatment of obstruction is a most serious threat to life. In late pregnancy, cesarean section plus surgery for obstruction may be necessary in the acute cases with urgent symptoms. In early pregnancy, operation for obstruction alone is indicated. In low obstruction with mild symptoms, the induction of labor may relieve the obstruction, or operation may be deferred until after delivery. The postoperative course will present the problems usually incident to the disease, and the need for parental fluids, suction and the maintenance of electrolyte and fluid balance must be considered as in every patient with intestinal obstruction.

Bochus[9] states that between 80 and 90 per cent of all adult patients having peptic ulcers are men. Death as a result of hemorrhage or perforation from peptic ulcer during pregnancy is indeed rare. McNalty[10] reported one maternal death from peptic ulcer in England for the year 1934. Hooker[11] in a study of 348,310 live births in New York City reported only one maternal death from peptic ulcer. Sandweiss, Saltzstein and Farbman[12] found only one maternal death from peptic ulcer in 70,310 pregnant women admitted to five Detroit hospitals.

The two cases of peptic ulcer complicating pregnancy in this series of cases have been prepared in detail for publication.[13] The incidence of peptic ulcer complicating pregnancy in this series is one in 6,000 pregnancies. Peptic ulcer complications began in both cases at term and after the onset of labor. Neither patient presented a past history of peptic ulcer. One case had a partial separation, and the other a complete separation of the placenta. Death occurred in both cases, a maternal mortality of 100 per cent, and one infant survived, a fetal mortality of 50 per cent. In the first case, autopsy revealed a perforated duodenal ulcer and Laennec's cirrhosis of the liver. In the second case, autopsy revealed hemorrhage from a duodenal ulcer and acute yellow atrophy of the liver. Only fifteen other authentic cases of death resulting from perforation or hemorrhage of peptic ulcer, and proved by autopsy, have been reported during pregnancy or the puerperium. Of these fifteen cases eight had duodenal ulcers, seven had gastric ulcers, eleven died from perforation, and four died from hemorrhage.

In the past, the consensus of opinion has been that pregnancy exerts a beneficial effect on peptic ulcer. Sandweiss[14] and his collaborators reported fifty-two pregnancies in twenty-five women who were shown to have peptic ulcer. In all but one case the ulcer symptoms disappeared during pregnancy. Many theories have been offered to explain the absence, the healing or the inactivity of peptic ulcer during pregnancy. Hurst and Stewart[15] suggests that the support offered the stomach by the rising uterus relieved strain thereby improving circulation and healing the ulcer. Mason[16] noted a decreased gastric acidity in the pregnant individual when compared to nonpregnant controls. Strauss and Castle[17] noted between the third and sixth month of gestation a marked decline in free acidity. In the last month of pregnancy acidity arose again, and markedly so during the postpartum period. The relationship between sex and incidence of peptic ulcer has led several investigators to place peptic ulcer on an endocrine basis and attempt sex hormone therapy.

The two cases in this series both showed placental separation and coexisting liver disease. In the previously reported cases, six showed evidence of kidney disease, one of which had convulsions, three had twin pregnancies, and one a past history of eclampsia. Carangelo and Efstation[18] reported four cases of massive gastric hemorrhage in pregnancy from probable superficial ulcerations of the stomach and esophagus. Three of these presented an eclamptic syndrome and stillborn infants. These cases might point to the toxemias of pregnancy and peptic ulcer as having a common or related etiologic background. Investigators have attempted to establish the etiology and treatment of both diseases on a pituitary adrenocortical hormone basis.

The results of a study by Opsahl and Long[19] indicate that significant quantities of ACTH are produced by the placenta which experimentally has the same activity as pituitary ACTH. Eastman[19] comments that this study constitutes an important contribution to the physiology of pregnancy and provides a plausible explanation for two phenomena. One of these is that normal pregnant women often develop edema. The second is the beneficial effect of pregnancy on rheumatoid arthritis. In the past, pregnancy was believed to exert a beneficial effect on peptic ulcer. The finding of placental ACTH, and the known effect of ACTH on peptic ulcer, would tend to lend discredit to this statement.

Surgery was not required during pregnancy in any of our patients having cholelithiasis, cholecystitis or hernia. It is a well established fact that pregnancy has some role in the etiology of gallstones. Ninety per cent of women operated on for gallstones have borne children. It is not rare to encounter the gravida who has attacks of biliary colic. Gallbladder colic seldom occurs before the fifth month, and relief is usually obtained by use of opiates, atropine or one of the synthetic antispasmodic drugs. The patient must be placed on a fat-free diet and observed carefully thereafter. Acute cholecystitis likewise can usually be treated conservatively although empyema of the gallbladder may require drainage. No surgeon relishes gallbladder surgery late in pregnancy.

Hernia is not uncommon in pregnancy. Unless the bowel is adhered, the growing uterus pushes the contents of the sac away from the hernial opening and produces a temporary cure. Umbilical and postoperative hernias are usually permanently enlarged by pregnancy.

SUMMARY

Pregnant women have the same surgical complications, and with the same frequency, as nonpregnant women of the same age group. Emergency surgery during pregnancy should be done without delay, but purely elective surgery should be postponed. In this review of 12,041 pregnancies, fifteen cases of extragenital abdominal surgical complications were found. Acute appendicitis occurred in eight cases, intestinal obstruction in five

cases and peptic ulcer in two cases. Of these fifteen cases, maternal death occurred in four cases and fetal death in five cases. Surgery was not required in any case of cholelithiasis, cholecystitis or hernia. With the knowledge of the grave potentialities of these complications and the possibility of their development during gestation, one should give more serious consideration to the frequent abdominal and gastrointestinal complaints of pregnant women. A carefully taken past and present history is of utmost importance in these cases. The history will often confirm the diagnosis. Only by careful evaluation of all symptoms and prompt attention to their treatment will the desired results be attained.

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The "Emotionally Shut-In" Family

NATHAN BLACKMAN, M.D., *St. Louis*

THE ISOLATED existence of the rural family is fast disappearing. The anonymity of urban existence is replacing the monotony and drudgery of life on submarginal farms. A study of family life in deprived, isolated, blighted areas shows enhanced emotional intensity within the family. It is this kind of isolated existence that gives rise to constricted, hamlet and kin-limited loyalties. The very closeness, the accentuated dependency of these families from deprived areas creates a sense of frustration, hostility and inadequacy whenever a member of such a family becomes shorn of his limited existence and faces the demands of living and sharing other than those with which he has been raised.

In a recent study of coal miners in an eastern Kentucky area Wisel and Arney[1] bring out the sense of insecurity with which these people face community and social demands when away from their homes. The coal miners manifest a passive, dependent attitude whenever life becomes too onerous or threatening. Anxiety is usually suppressed or even not present or is at times sublimated into sudden religious conversions. Blackman and Klebanoff[2] found the rural family excessively dominated by father and favoring the inclusion of the schizoid woman as an integrated participant. The intense emotional sharing and physical closeness of the rural family gave rise to a higher incidence of disagreements and quarrels, and the cultural pattern was more compatible with schizoid personalities.

A number of coal miners from small communities recently examined (through the Welfare and Retirement Fund, U.M.W.A.) confirmed common personality factors which prompted this article. These individuals have led an economically submarginal and socially shunned role in their communities. Some of them had migrated to the mining regions from even more isolated areas. Their search for recognition is intense. It is not rare to find that a refusal to be put on a day shift, a denial of promotion, despite long periods of devoted work in a particular job, cause deep frustration, culminating in outbursts of anger toward authoritarian figures who have again proved to be non-accepting. For some, periods of war work in large cities did not remove the deeper ingrained cultural pattern—namely, a recollection, a carry-over from childhood of sudden outcroppings of hostility, even direct aggression, against the domineering father as well as anger toward a self effacing, extremely passive mother. As the individual reaches his own place as head of the family, he becomes aware of feeling quite inadequate and incapable of assuming the roles of assertiveness that he recalls his father held. He finds his wife much more assertive and prominent than his recollection of the other important female in his life, his mother. A feeling of defeat, doubts as to his virility, bouts of alcoholism and sexual promiscuity succeed each other. As the anxiety continues rampant, periods of religious exaltation may become manifest, even to the point of having revelations or compulsions to become a preacher. If even these extreme attempts at sublimation fail, the psychotic reaction finally intervenes. The main content during the psychotic period is aggression and hostility—toward authority, society, the foreman, the author-

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Read at dedication exercises, Mary Imogene Bassett Hospital, Cooperstown, N. Y., June 26, 1953.

itative member of the family, the father, toward whom needs to vent anger were never candidly expressed.

This undertone of suppressed hostility is nurtured by the emotionally constricted, intensely dependent family existence, where every manifestation of emotional conflict produced unbearable tension, where the frustrations and limitations of existence exacted a toll of absolute obedience, where the right to communicate, to establish one's uniqueness was limited or even completely inhibited. This syndrome of the emotionally shut-in family as it exists in the rural, socially and economically deprived family can also be found in urban existence where the anonymity, as well as the passive and frequently nonparticipant attitude toward the community, prompt a similar development of the "emotionally shut-in" family.

PREDOMINANT FAMILY CONSTELLATIONS

1. *The Domineering Father.*—The child reared in this family grows up with a constant reminiscence of the overbearing, heckling or belittling father. He will find himself repeating some similar acting out of authoritarian roles, thus setting the stage for the compulsive repetition of male roles remembered from his childhood. With this repetition comes a recrudescence of anxiety as the shattering recollection of the lack of status during the formative years becomes apparent again. In order to veil this apprehension and anxiety, compulsive, even ritualistic, behavior may ensue.

2. *The Passive Mother.*—In this family group the mother assumes for herself the role of martyr, often resorting to somatic complaints to reinforce her claims for passivity. Yet she contrives somehow to isolate, constantly punish and belittle her husband. The children not only learn a one sided "Men are evil" outlook in their strivings for a status of their own; they also become aware of a lack of spontaneity or genuineness, as they are constantly manipulated in this struggle between the parents. The boy abdicates his need for feeling close and proud of his father; the girl, her need to be accepted and admired by him. Everybody's resources are devoured by the power hungry, consuming, crippling struggle, by this fight for prestige that takes place among the adults, forcing the children into taking parts which are not naturally theirs, and ultimately resulting in severe and lasting anxieties.

3. *The Distant Parent.*—The children are raised without any apparent struggle between the adults —there is rather a denial of interest or a withdrawal from intimate sharing of affection so that emotions of anger, fear, even love are suppressed—but all along one's very existence becomes an intrusion, an imposition, a stimulus for only half disguised annoyances by either parent. The schizoid individual is a result of this family constellation.

Not only these three parental types but all possible combinations of any of them may exist, creating out of the common destiny for family co-existence an emotional turbulence, superseding and swallowing up any of the real and basic functions of the family. In such families the acting out of roles acceptable to mother, or the constant image, in memory or fact, of a dangerous, disapproving, angry father become so absorbing and threatening that it practically excludes any effort at common sharing, participating or relating. Emotions become either stifled completely or surcharged with a feeling of apprehension. The need for aggression toward father is quite likely to be paled by the even greater anger toward the frustrating, inhibiting mother.

Hare[3] stresses the importance, in the ecology of mental illness, of the need to be accepted by the group and the ability to submit to the conventional controls of the community in which one lives. In the ever changing culture the ability to communicate, to share integrally is much more difficult and, hence, our era provokes greater emotional stress in the individual. But it is as important to be aware that emotional stress stems from the unrelieved aggression, the pent up anger, the conditional acceptance within the shut-in family in which the acting out of roles, the participation in affective sharing has been difficult, where the compulsion to ape and repeat—rather than to live and freely choose—was a "must." It is this hapless repetition of anxiety or threat, as recalled from one's childhood—the inability to cast off examples of parental discord and to assume, as well as to express, one's own potential for life that becomes mandatory in the shut-in family. The more limited emotionally the parental existence has been, the more stifling the needs and the drives which the culture imposes, the more crippling the effect on childhood, the more indelible and lasting the need to resort to anxiety and tension upon meeting current dangers, disapprovals or lack of consideration in one's adult years. So as one approaches new situations in life, as he assumes roles of parental or social leadership, these roles become charged with threats reminiscents of situations and feelings intolerable in terms of a past where to be noticed, to take a stand, or exact a right was unbearable, if not impossible.

The need for recognition, for intimate, relaxed and empathic acceptance of the minutiae of life, of the needs and hurts, the dilemmas of feelings and attitudes often becomes apparent in group therapy situations. After the initial outpouring of hostility toward the leader and the realization that for once there will be no repercussion, comes an acknowledgment of demands unrequited, of rights sensed but never assumed. The individual learns that for once he has a right to be heard, to be listened to, to be important—to assume and relive roles of sharing. The clamour "to be led,

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to be given guidance or interpretation" wears off as each member begins to realize that his participation, his right to vent feelings is the crux and matrix upon which the group's effectiveness depends. As the significance of intimate relationships, of attitudes, be they excessive domination, withdrawal, overprotection, or rejection, unfair competitiveness or complete denial—whatever each individual's lot has been—as roles become expounded and shared with other members of the group, accepted and elaborated on by the group leader, analogies in other people's lives recognized, and reassuring support obtained from the rest of the group—a renaissance of confidence and reassurance of one's own validity takes place. The patient ceases to vent exaggerated demands toward his family. Instead he accepts a forthright and meaningful attitude toward himself, and hence toward the other members of the family.

SUMMARY

The "emotionally shut-in" family existence has been observed in a rural, economically and socially deprived area. In these families—tightly knit, father dominated—the children's needs for role and status were often hampered by the intense frustrations and hostilities between the parents whose emotions often remained pent-up, inhibited or unexpressed so that competitiveness for roles and expressions of one's own emotional needs became unbearable.

The "anonymous" urban family is often exposed to a similar shut-in existence by virtue of the passivity of its life and the relative insignificance and little caring that one obtains as members of the mass environment.

The ever changing culture presents added stresses in the search to find a sense of intimate belonging and in the ability to share freely and to communicate with others. The sequelae of an "emotionally shut-in" family existence added to the effects of unstable culture act to perpetuate a sense of aloofness, of nonparticipation and an absorption in one's own doubts about existence.

The urge or need for more intimate relating with others can be readily tapped in group therapy relationships. The awareness of this syndrome may be helpful in planning for group participation, in providing a greater sense of accomplishment for an ever growing population of passive, nonassuming in responsibility and, hence, noncontributing toward the weal of others be they one's own children, the family group, the town, city or state.

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Mild Diarrhea in Children

Clinical Evaluation of Oral Electrolyte Therapy With a Nonabsorbable Sulfonamide for Treatment

LEROY J. STEPHENS, M.D., *St. Louis* AND WILLIAM E. HENRICKSON, M.D., *Poplar Bluff*

MUCH HAS BEEN written on the cause of diarrhea, ranging from simple underfeeding or anomalous diet or hygiene to real dysenteric infections. Regardless of cause, during the last ten years numerous investigators and clinicians have verified the fact that lowered mortality has resulted from a regimen of treatment that recognizes the importance of dehydration, loss of electrolytes and acidosis.[1, 2, 3, 4] Dehydration has come to be known as one of the most dreaded complications of diarrhea.[5] This is not difficult to understand when one considers, as Hill points out, that the infant exchanges about one half of his extracellular fluid in a day's time compared with one seventh exchanged by the adult. Hill states further that a disorder like mild diarrhea might be of little consequence in an adult and yet cause a near moribund state in an infant.[6]

In an excellent study on body fluids and electrolyte balance, Merrill calls attention to the importance of realizing that dehydration usually means loss of both water and salts. If sodium has been lost in relatively greater proportion than chloride, the chemical situation reflects the loss of more basic ions than acid, and chemical acidosis results. Since raw sodium cannot be given, one excellent method of solving the problem is to give sodium as a salt in which the anion component is destroyed in the body, leaving the sodium to balance the excess of chloride or other anions already present. A simple way of doing this is to administer sodium bicarbonate or sodium lactate. With both these substances, the anion is metabolized to carbon dioxide (which is then excreted by the lungs) and water, leaving sodium available for body needs. The respiratory mechanism rapidly and effectively compensates for chloride loss from the gastrointestinal tract through retention of carbon dioxide by the lungs and conversion of this carbon dioxide to the bicarbonate ion.[7]

Darrow, et al, confirms and amplifies the theory that the loss of body potassium in excess of the loss of sodium is a striking feature of diarrhea. Replacement solutions rich in potassium permit repair of body H_2O and electrolytes without prolonged parenteral therapy.[3] Replacement of potassium losses is best accomplished when possible by the oral route because, unlike the depletion of extracellular ions, potassium losses need not be replaced rapidly since replacement therapy to some extent is limited by the ability of the cells to take up the ion presented to them through the extracellular fluid.[7]

Hansen, et al, state that their studies revealed that maintenance of fluid and electrolyte balance in the early stages of diarrhea may go far in preventing the development of severe dehydration and acidosis and resulting death.[8] The majority of cases of diarrhea in infants and children are treated by practicing physicians and in clinics and only the more severe cases are referred to hospitals.[5] Our interest is in finding a method of treatment in the early stages of diarrhea that will be effective in preventing the condition from reaching a severity that requires hospitalization. We report herewith our experience in handling fifty-four cases of diarrhea under controlled conditions.

METHOD OF STUDY

For this study a series of 145 infants and children were used. These patients were from a rural area and a city office clientele. Many of these patients were hospitalized, especially those from the rural area since it was felt that more dependence could be put on treatment in the hospital. They ranged in weight from 6 pounds to 40 pounds, the average weight being 18 pounds. They ranged in age from 3 hours to 33 months. All were diagnosed as having diarrhea, presenting various degrees of the same picture: mushy to watery stools numbering from five to fifteen a day, high temperatures, anorexia, nausea, vomiting, colic, regurgitation, abdominal distention, convulsions, with evidence of bloody stools in five of the cases. Slight dehydration (tongue slightly dry, poor fluid intake, fontanel questionably sunken) was present in 47 per cent of the cases; moderate dehydration (skin symptoms in addition to the previously named) was present in 10 per cent of the cases, and severe dehydration (full blown picture) was present in 13 per cent of the cases. Carbon dioxide combining power was checked in five of the cases. Weight was checked in all cases at the start of treatment and on discharge.

Treatment consisted of the oral administration of a solution containing 10 grams of sodium and potassium lactates in each 100 cc. (representing 0.8 gram of elemental sodium and 2.5 grams of elemental potassium); 4 grams of phthalyl-sulfacetamide, 4 grams of sodium carboxy-methylcellulose and 5 per cent glucose.* We selected a

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* Kalacet used was prepared by Donley-Evans & Company, St. Louis.

combination of electrolytes with nonabsorbable sulfonamide because we believed it possible to control the diarrhea in the early stages and thus eliminate the necessity of resorting to systemic medication later. Phthalyl-sulfacetamide has been shown to be a nontoxic, clinically safe sulfonamide that diffuses into all layers of the intestinal wall, sterilizes the intestinal contents, yet is not detectable in the blood stream following oral administration.[9, 10, 11, 12, 13] This solution was given in a dosage of 5 cc. per kilogram of body weight in twenty-four hours in divided doses in water in those cases in which dehydration was classed as mild, and in a dosage of 10 cc. per kilogram of body weight in twenty-four hours in divided doses in water in those cases in which dehydration was classed as moderate to severe. Fifty-four of these patients were set up as an evaluation group and ninety-one of them as a control group. A variety of other medications were used including penicillin, aureomycin, terramycin, streptomycin, diets of skimmed milk, homogenized milk, Casec and Probana. Treatment in both evaluation and control series were identical with the one exception that the control group did not receive the solution containing electrolytes and nonabsorbable sulfonamide.

RESULTS

1. The results observed in the evaluation group confirmed our thinking as well as that of Hansen, et al., that the early treatment of diarrhea in infants and children with potassium rich replacement solution may go far in the prevention of severe dehydration, acidosis and resulting death.

2. The early use of oral electrolyte solution with a nonabsorbable sulfonamide shortens the duration of the disturbance. In the evaluation group diarrhea stopped within twenty-four hours in most cases. Patients were released within seventy-two hours with instructions to continue medication for two to three days longer.

3. In only seven of the more severe cases out of the fifty-four cases was it necessary to resort to supportive parenteral electrolyte therapy. It was interesting to note that no severe acidosis developed and that no toxicity was encountered. In two of the cases, aged 3 hours and 4 days, fluid balance was quickly established even though electrolyte clearance is usually considered difficult in infants of this age. No death resulted. In only six of the fifty-four cases were results not up to our expectations.

4. In the control series, in which no oral electrolytes were given and in which reliance was placed mainly on diet, antibiotics and other older therapies, from forty-eight hours to seven days were required to control diarrhea. We do not feel, however, that the therapy used was adequate in the light of present day knowledge because no consideration was given to correcting the fluid and salt imbalance.

SUMMARY AND CONCLUSIONS

1. Electrolyte therapy should not be reserved for only severe cases of diarrhea.

2. The oral administration of an electrolyte solution corrects the imbalance resulting from diarrhea in mild cases within twenty-four hours.

3. An electrolyte solution with a nonabsorbable sulfonamide is effective in controlling mild diarrhea in infants and children in 89 per cent of the cases.

4. We feel our preliminary findings fully warrant further and continuing investigation of this type of therapy.

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BOOK REVIEW

On Burns. Compiled and Edited by Nathan A. Womack, M.D., Participants, Drs. William Altemeier, James Barrett Brown, W. J. H. Butterfield, Truman Blocker, Julian Bruner, Stuart Cullen, Sam May, Carl Moyer and Sidney Ziffren. Charles C Thomas Publisher, Springfield, Illinois. Price $5.50.

This is an excellent symposium on burns. Discussion is given by five outstanding men, Drs. J. B. Brown, Truman Blocker, William Altemeier, W. J. H. Butterfield and Carl Moyer.

Many aspects of the burn problem are considered, such as the open treatment of burns, early care and grafting of acute burns, the problem of infection, enzyme debridement of the burn eschar, burn shock and nutrition of the burn patient. Report is also given on the results of the use of adrenal cortex hormone in burn cases.

The book is highly recommended to be read by all those interested in the fundamental principles of management of burns. F. X. P.

Postgraduate Review

Giardiasis

MAURI FELDAKER, M.D., *Rochester, Minn.*

GIARDIASIS IS NOT an uncommon disease, although its frequency is seldom stressed. In the United States, 5 per cent of the adults and 20 per cent of the children are infected.[1] The parasite, until recently, has been considered of little pathologic importance, but many physicians now believe that giardia lamblia is capable of causing disease.

This paper will attempt to review the literature in the last five years concerning giardiasis.

A case of a 14 year old boy with duodenal ulcer and giardia lamblia infestation of the intestine will be presented.

REPORT OF CASE

J. J., a 14 year old Negro male, entered the St. Louis County Hospital on February 22, 1952. For the last nine years he had lived in St. Louis County. For three years, the patient had intermittent episodes of aching dull abdominal pain, two to three times a week. The pain was localized to the epigastrium and occurred at any time of the day. There was associated nausea and emesis and the pain was relieved by antacids. Other than voiding four times daily, he had noted no urinary symptoms or edema.

Examination disclosed a blood pressure of 85/50. There was a grade one apical systolic murmur and tenderness in the abdomen. No jaundice was present.

Urinalysis of the initial specimen revealed albuminuria, red cells, white cells and several granular casts, but subsequent specimens revealed normal specific gravity and urinalyses. Nonprotein nitrogen, sickle cell preparation, serology, cholesterol, diastase, renal phenolsulphathalein test and intravenous pyelogram were normal.

White blood count was 6,050. Several differential white cell counts revealed similar findings: Eosinophils 16, segmented white cells 46, lymphocytes 46, monocytes 2. Eosinophils were never lower than 7. Red blood cell count 5.07. Hemoglobin 14 grams per 100 cc. Hematocrit 44.

Stool examinations were consistently negative for occult blood, but revealed abundant numbers of giardia lamblia ova. Duodenal drainage on three occasions revealed no ova or parasites. Proctoscopic examination was not contributory. Upper gastrointestinal roentgen rays revealed a duodenal ulcer. Barium enema was normal. A gallbladder examination was not done. Gastric analysis revealed abundant free hydrochloric acid with good response to histamine.

Treatment included ulcer diet, Amphogel and tincture of belladonna. The patient was given 0.05 gm. atabrine, three times daily for five days. Symptoms promptly subsided and the stools became negative for ova. The patient was followed for three months and continued to have no symptoms while following ulcer regimen and stools were consistently negative for ova.

DEFINITION

The term giardiasis denotes infestation by the protozoan flagellate giardia lamblia. The primary effect of this parasite is in the small bowel especially the duodenum and in the gallbladder and biliary tract.

ETIOLOGY

Giardia lamblia is a pear shaped flagellate measuring from 12 to 20 microns in length and has a depression on one side of the blunt edge by which it attaches itself to the epithelial cells of the intestinal wall.[2] Three pairs of flagella are arranged about the depression and one at the pointed end. Two nuclei are present.

Giardia is disseminated in the encysted stage and unless active diarrhea from the small intestine exists or the stool is obtained by catharsis, only cysts will be found. The cysts are oval and measure 8 by 14 microns and are surrounded by a fairly thick hyaline wall. Internal structure can be found in "Clinical Diagnosis by Laboratory Methods" by Todd and Sanford.[2]

TRANSMISSION

The disease is transmitted in the cyst form. These cysts are resistant and may be eliminated for years in symptom free and apparently cured individuals. Food, flies and fingers of individuals may carry the cysts. The human infestation is probably of human origin, not by giardia found in rodents. Cysts can be carried through the air. Unhygienic living conditions are usually a factor.[3]

HISTORY AND EPIDEMIOLOGY

Leuwenhoek saw and described giardia in his own stool in 1675. Lambl described and named it in 1859. Kofoid in 1915 proposed the name Giardia Lamblia stiles and named it giardia enterica in 1920. The first American case was in 1902.

Giardia has a world wide distribution. There are no continental or climactic confines. It is more frequent in temperate, subtropical or tropical climates.

INCIDENCE

The incidence of giardia infestation has varied in different reports. In the United States the incidence has been reported as high as 12 per cent. Of 1,539 selected patients and food handlers at the University of Chicago Clinic, twenty-three

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cases were found, an incidence of 1.5 per cent.[4] Other investigators have reported an incidence of 6.5 per cent in the adult, and as high as 22 per cent in children.[5]

In 732 routine cases at Evans Memorial Hospital in 1935, MacPhee and Walker reported six cases with positive biliary drainage findings of giardia, an incidence of 0.82 per cent.[6]

PATHOGENESIS

Can giardia lamblia cause disease? This question has been discussed for many years. Some physicians believe that the parasite may constitute a contributory factor to the state of disease or dysfunction already present in the small intestine or gallbladder. But the majority [3, 6, 7, 8] seem to conclude that the evidence is sufficient to state that giardia are pathogenic. There are reports that ill patients who have no other explanation for their symptoms have their symptoms alleviated or removed by reducing or eliminating the parasite.

Without an effective treatment the pathogenicity was difficult to prove, but with atabrine, giardia can be eliminated completely in a short time and the concensus is that the parasite does cause a variety of intestinal and biliary symptoms.

Prior to the introduction of atabrine, there were considered to be three groups of patients with giardiasis: (1) those with infection without clinical symptoms, (2) massive infection of the colon (more common in children) with symptoms of dysentery, and (3) infection of the small intestine with a variety of symptoms, usually but not exclusively in adults.[7]

However, reports by Kyser and Hartman[9, 10] indicate they believe that some of the symptoms are probably functional. They state all symptoms in their series of patients were not due to giardia. It could be a harmless invader, they state, but the 60 per cent of patients with giardiasis had diarrhea and 65 per cent had abdominal pain, which was thought not to be a coincidence. Eradication of the giardia alleviated the symptoms in some cases.

PATHOLOGY

There have been so few autopsy cases of patients with giardiasis that no pathologic specimens are reported.[1] It has been stated that giardia lamblia attaches to the epithelium of the duodenum and jejunum by a sucker-like apparatus and even penetrates within the deeper glandular layers and so distorts the duodenal cells as to be recognizable by microscopic examination of fresh aspirates.[3] Constant irritation was proposed as producing inflammation, edema and mechanical obstruction of bile. The whiplike motion of the tail was thought to introduce infection into the common bile duct.

Microscopy of duodenal aspirates has been said to show evidence of duodenitis.

The production of succus entericus is perhaps interfered with by the parasite.[3]

CLINICAL FEATURES

There are no typical symptoms or signs to indicate a giardial infestation. The patient may be of any age and there is no difference in incidence between males and females. One investigator[4] believed giardiasis was more frequent in males and in younger individuals of an average age of 30 years.

There may be diarrhea during the acute stage, especially in children. Chronic cases may manifest nervousness, irritability of the intestine, abdominal gas or cramps, alternate constipation and diarrhea, depression and pallor. Tenesmus, anorexia, nausea, pyrosis, emesis, abdominal pain especially in the right upper quadrant, headache, loss of weight, weakness and neuralgia have been reported.

Lyon[3] noted diarrhea as being more common in children. Chronic constipation was especially prominent in the adult. Abdominal pain in the upper abdomen with an "all gone sensation" like a hunger pain occurred.

The symptoms may simulate gastrointestinal, gallbladder or biliary disease. A case has been reported of icterus, enlarged liver and pain in the right upper quadrant of the abdomen associated with giardiasis.[6]

Zahorsky,[12] in an early paper, stated that in infants a syndrome of symptoms occurred which was definite for giardiasis. He lists these as protracted diarrhea, gradual distension of the abdomen and retarded growth. In infants the increased intestinal persistalsis leads to decreased food absorption and consequently retarded growth.

Hartman and Kyser,[10] of the Mayo Clinic, reported 100 cases of giardiasis in 1941. There were more males than females and the age range was from 2½ to 70 years. The symptoms, in order of frequency, were diarrhea, pain and distress in upper abdomen, nervousness, asthenia, pain or distress in lower abdomen, emesis and fever. Eleven patients had no symptoms. Fifteen patients had other disease demonstrable such as ulcer, chronic ulcerative colitis and cirrhosis.

These authors noted an incidence of diarrhea in patients with giardiasis of 60 per cent (corrected by eliminating those with other organic disease to 52 per cent), and abdominal pain in 65 per cent. They stated that these findings seemed more than a coincidence since with eradication of the parasite they obtained some relief.

LABORATORY FINDINGS

It has been stated that giardia are intolerant to hydrochloric acid, but in one series about half of those tested had hyperacidity.[3] Free acid was present in all patients with giardiasis in another series,[4] except those with other diseases, which could cause achlorhydria.

Occult blood is not uncommon in giardiasis, but gross blood is rare. One author[4] believes that blood does not occur in pure giardiasis.

Eosinophilia has been stressed, but may be normal, low or absent. Recently, some investigators have stated that giardiasis was not accompanied by eosinophilia[3, 4, 6] but another[13] has noted eosinophilia of more than 4 per cent frequently. This investigator[13] noted an apparent relationship between severity of infestation and the degree of eosinophilia. The drop of eosinophils paralleled clinical improvement when treated with atabrine.

Stools are large and greasy sometimes and, in children, they have been noted to be white, fatty and frequently foul.[14]

Giardia are present in the stool and duodenal drainage.

Infection with giardia acts as a barrier to intestinal absorption and leads to celiac symptoms. Low vitamin A absorption and blood level has been reported in a 28 month old child.[15] There was also poor absorption of dextrose. With quinacrine treatment, these results became normal and the patient gained weight.

DIAGNOSIS

The diagnosis of giardiasis is made by finding the cyst or flagellate in the stool or duodenal drainage. There is a report of one case with giardia in the gallbladder at operation and nowhere else apparently.[16]

DIFFERENTIAL DIAGNOSIS

The vague symptomatology with giardiasis often leads one to suspect gallbladder, biliary or intestinal disease such as a peptic ulcer. Icterus and hepatomegaly in one case[6] was associated with giardiasis. Diarrhea due to teething in the infant has been pointed out as a possible confusing condition.[14]

TREATMENT

In 1925, Lyon and Swalm[3] stated that there was no specific treatment for giardiasis. The majority of cases had gallbladder involvement and weekly duodenal drainage with magnesium sulfate was considered worthwhile. The magnesium sulfate stunned or inhibited the movement of the parasite and the parasites had no power to attack. Cholecystectomy usually did not cure the condition.[6] Other treatment which is apparently seldom used now include thymol, emetin, salines, bismuth compounds, especially bismuth salicylate and arsenical drugs, such as carbarsone and stovarsal.

Atabrine now is the treatment of choice for giardiasis. It is effective in almost every case. Galli Valerio, in 1936, was the first to report the effect of atabrine on two cases of giardiasis. Soon other investigators noted beneficial effects. Quinacrine (the French equivalent of the German atabrine) had favorable results in more than fifty cases reported in 1936 by Martin.[18]

Acranil, an acridine derivative closely related to atabrine or quinacrine, was used in fifty cases reported by Berberian.[18] He found it well tolerated and without toxic effects, except slight discoloration. The dose is given, by age groups (equivalent with atabrine dihydrochloride):

TABLE I

ATABRINE DOSE IN GIARDIASIS

Ages		
	3-6	0.1 Gm. daily for 5 days
	7-12	0.2 Gm. daily for 5 days
	13 or more	0.3 Gm. daily for 5 days

Seven cases of giardia were successfully treated with atabrine reported by Chatterjee in 1942.[17]

Atabrine dihydrochloride is eliminated through the biliary tract and there is no contraindications except in advanced liver disease.[9] It is said to be specific, simple, harmless medication for the treatment of this condition. More than one course of treatment can be given.

Hartman and Kyser, in 1941,[10] reported forty-six cases at the Mayo Clinic treated with atabrine. The dose was 0.3 gm. daily for five days. The medication was discontinued and the stool and duodenal drainage examined. Only in rare instances is the organism in the duodenal drainage and not in the stool. Of thirty-five cases with a followup, all but one had successful results in elimination of the parasite. Thus atabrine was 97 per cent effective.

Other measure that can be employed include: (1) proper care of the general health, removing foci of infection and using supplementary iron compounds for anemia, (2) proper diet to include supplementary vitamins and avoidance of gallbladder contraindicated foods, (3) dilute hydrochloric acid with meals has been recommended because of low gastric acidity at times,[11] and (4) treatment of gastrointestinal symptoms.

COMMENT

The association of a duodenal ulcer in a 14 year old boy with giardia in the stool seems noteworthy. Since the known primary site of giardia lamblia is in the small intestine, especially the duodenum, the casual relationship of the duodenal ulcer to the infestation is questioned.

Whether giardia alone can cause a duodenal ulcer is speculative. Large numbers of the parasite might conceivably do this. It is difficult to state the part of the psyche in the production of the ulcer in this patient. He did, however, have a high gastric acidity with abundant free hydrochloric acid.

There have been reports of a duodenal ulcer in patients with giardiasis[10, 13] but certainly the number of these cases is small and the relationship of these two conditions has not been as greatly stressed as that between gallbladder disease and giardia lamblia infestation.

CONCLUSIONS

Giardia lamblia is capable apparently of causing disease. Its primary effect is in the small intestine, especially the duodenum, and biliary tract. The cyst is transmitted in the feces even in symptom free individuals. It has world wide distribution. There are no typical symptoms and signs and it simulates gallbladder, biliary and intestinal disease. Diarrhea, which may alternate with constipation, abdominal distress and a variety of other symptoms are common. The diagnosis can be made only by finding the cyst or flagellate in the stool or duodenal drainage. Eosinophilia, occult blood, gross stool changes and achlorhydria are not necessarily constant findings.

The treatment of choice is atabrine.

SUMMARY

Giardiasis is not an infrequent disease and every physician should be aware that it may simulate a number of abdominal diseases. A stool examination and a duodenal drainage are the only means to make the diagnosis. Atabrine is the treatment of choice and seems to be specific.

A case of a 14 year old boy with a duodenal ulcer and giardia lamblia infestation is reported.

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Case Report

Rhus Dermatitis

Treatment With Corticotropin and Cortisone

DONALD L. FUHRMAN, M.D., *Kansas City*

APPROXIMATELY ONE year ago Dr. Glen Shepard[1] called Dr. Charles C. Dennie[2] concerning his experience with the use of Corticotropin and Cortisone in the treatment of dermatitis venenata due to Rhus toxicodendron, Rhus diversiloba and Rhus glabra. At that time the drugs had not been used for this purpose by Dr. Dennie; however, since that time they have been used in numerous cases and we wish to report results.

The following tabulation and summary is on twenty-five cases only, the follow-up being inadequate in the remainder of the patients.

	Duration of Disease When Seen	*Dosage of Purified ACTH-Gel*	*Dosage of Cortisone Acetate*	*Course of Disease From Onset*
1.	2 days	80 units		10 days
2.	4 days	40 units		8 days
3.	5 days		375 mgs.	10 days
4.	2 days	100 units		7 days
5.	2 days	60 units		10 days
6.	3 days	40 units		7 days
7.	3 days	80 units		6 days
8.	2 days	60 units		8 days
9.	2 days	80 units		12 days
10.	3 days		450 mgs.	9 days
11.	1 day	40 units		10 days
12.	6 days	40 units		12 days
13.	4 days	80 units		10 days
14.	3 days	40 units		11 days
15.	2 days	40 units		8 days
16.	2 days	60 units		7 days
17.	3 days	80 units		10 days
18.	3 days	40 units		10 days
19.	3 days		250 mgs.	9 days
20.	2 days		450 mgs.	9 days
21.	2 days	40 units		10 days
22.	4 days	80 units		8 days
23.	3 days	100 units		8 days
24.	2 days		375 mgs.	10 days
25.	5 days		375 mgs.	14 days

The average total dosage of ACTH-Gel was 60 units in nineteen patients and 362 mgs. of Cortisone Acetate in six patients. The course of the disease from the onset of the disease process was ten plus days.

The dosage schedule used for ACTH-Gel was 40 units as the first dose, 20 units the second dose and 20 units the third dose. The patients were asked to return every other day. Oftentimes it was not necessary to give the third dose, and many patients did not return after the first dose. Several patients received 40 units on the first dose and only one additional injection of 20 units.

The dosage of Cortisone Acetate tablets was one tablet every eight hours, the amount prescribed being enough to last seven to eight days. It was never necessary to continue this longer than one week.

It should be mentioned that in addition to the administration of one of these drugs, each patient was given a prescription for potassium permanganate wet compresses and, if a larger area of the body was involved, baths were employed. For the eczematous areas an antipruritic lotion consisting of ¼ of 1 per cent camphor gum and 5 per cent liquor carbonis detergens in a calamine zinc oxide and lime water base was prescribed.

COMMENTS

The first impression gained in the administration of ACTH-Gel and Cortisone Acetate was that the patients secured almost complete relief from suffering through the vesicular, erythematous, edematous and itching stage of the disease process. They were able to resume normal or nearly normal activities while they were convalescing.

Secondly, patients who had had previous attacks stated that they recovered much more rapidly from this episode than from former attacks.

Thirdly, recovery was within a period of two weeks, never longer, unless the dermatitis had been aggravated by self-medication. Many of these patients had received injections of poison ivy extract during the acute attack, topical medication containing local anesthetics, and antihistamine ointment, all of which are strong sensitizers. Such agents often aggravate the dermatitis, thereby lengthening the course of the disease process. When ACTH-Gel or Cortisone Acetate are used, these medicaments need not be used. In some cases the patient completely recovered within ten days. Rhus dermatitis treated in the conventional manner requires from two to three weeks for recovery, and in a few cases up to four weeks. This therapy reduces the convalescent period considerably.

The course of the disease does not immediately subside. Rather the patients sometimes develop vesicles for the first few hours or even days after beginning therapy. These drugs do not abort the dermatitis.

SUMMARY

Twenty-five cases of Rhus dermatitis are tabulated, showing the results, and comments on treatment made.

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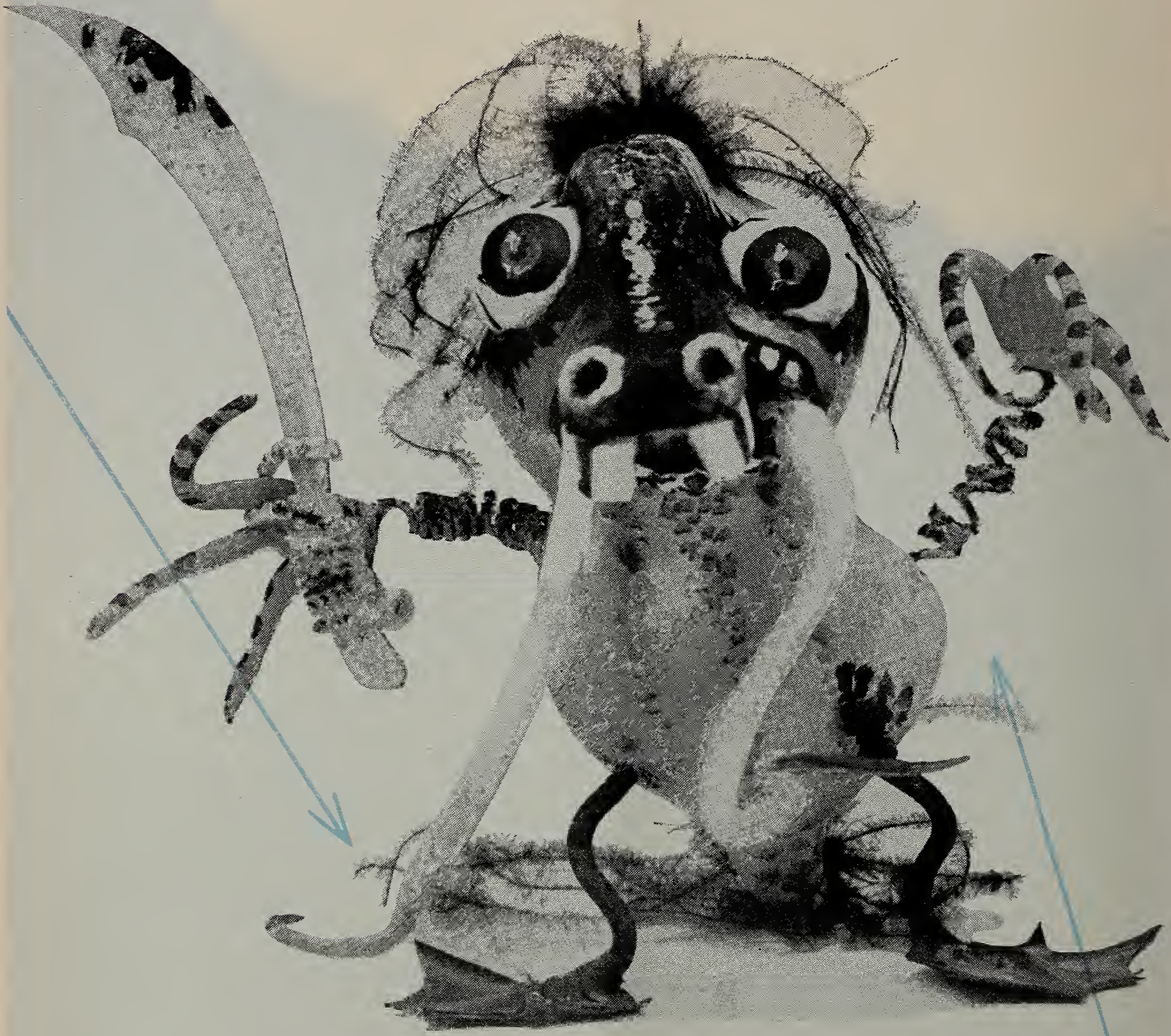

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Special Articles

The Constitution and Treaty-Making Powers

HONORABLE JOHN MARSHALL BUTLER

Senior United States Senator from the State of Maryland

To be invited to address you today is indeed a high privilege and an honor. You have asked that I talk to you about the Constitution and the treaty-making power. That is a many sided and complex question. I will speak briefly on the extent of that power and the method proposed to curb it.

I first became interested in it through the writings of Frank E. Holman, past president of the American Bar Association, whom I have since come to know intimately and well. Mr. Holman is a fine man, a great patriot, a man who has devoted himself to many hours of time and no inconsiderable amount of money seeking to remedy what he and others consider to be a grave situation.

I have always been interested in Constitutional questions. It was that interest that finally persuaded me to put aside my profession and seek public office. It was natural, therefore, that upon my election to the United States Senate I should seek out a place upon the subcommittee on Constitutional amendments of the Committee on the Judiciary. Having gained that position, I immediately associated myself with my dear friend and colleague, John W. Bricker of Ohio, for the purpose of forwarding his efforts in getting through a Constitutional amendment to curb the treaty making power.

John Bricker is convinced, as I am, that the American people want to make sure that no treaty or executive agreement will be effective to deny or abridge their fundamental rights, and that such rights are not controlled or supervised by international agencies over which they have no control. Or to state the problem more succinctly, we and many others in and out of the Congress are convinced that it is essential that we have a bill of rights against the treaty making power.

There was much debate about the matter at the time of the adoption of the Constitution in 1787. It was then argued that the first ten amendments to the Constitution of the United States apply to the whole Constitution, including the treaty making power, defined in Article VI. However, such has not proven to be the case; on the contrary, there is substantial authority for the proposition that the treaty power is practically without limit.

Let us look first to the relevant sections of the Constitution of the United States. By subsection 2 of Article II, the power is conferred upon the Chief Executive to make treaties by and with the advice and consent of the Senate, two thirds of the members present and voting concurring. By subsection 2 of Article VI of the Constitution, treaties may in the manner prescribed by that article become the supreme law of the land. That article says that this Constitution and all acts of Congress passed pursuant thereto and all treaties made or which shall hereafter be made under the authority of the United States shall become the supreme law of the land.

By subsection 18 of Section 8, Article I of the Constitution, which we call the necessary and proper clause, Congress is empowered to make all laws which are necessary and proper to carry into execution the powers granted it under the Constitution, and all other powers vested by the Constitution in the government of the United States or any department or officer thereof.

Note the language of subsection 2 of Article VI, which says, "This Constitution and the laws of the United States which shall be made in pursuance thereof and all treaties made or which shall be made under the authority of the United States shall be the supreme law of the land." An act of Congress under that language to be valid must be made pursuant to the Constitution. A treaty is valid and becomes immediately operative if made under the authority of the United States.

Those opposed to curbing the treaty making power say, yes, that is true, but there are many cases decided by the Supreme Court of the United States which hold that a treaty cannot violate the Constitution nor authorize that which the Constitution forbids. They say that a treaty is of equal dignity with an act of Congress, that it takes primacy over the Constitution and the laws of the several states, but that it ends there. I respectfully submit the question cannot thus be lightly disposed of.

Mr. Justice Holmes in deciding the case of Missouri vs. Holland in 1920 indicated strongly that there may be no limit on what can be done in treaties made "under the authority of the United States." That is a far reaching and important case. It gave rise to two remarkable doctrines. The first I have already alluded to, that if there is a treaty made under the authority of the United States it need not necessarily be Constitutional. Then it also brought into the law what I suggested in Washington during the hearings on the Constitutional amendments could be called the "bootstrap" theory. It decided this: that while the Congress of the United States under the original grant of power, under the Constitution, may not constitutionally act in a given field, it may do so after the formation and adoption of a treaty.

That would work this way. The facts of the case are simple and illustrate the point fully. A great New Yorker, John W. Davis, was Solicitor General at the time of the decision of that case. The case arose through the passage of migratory birds over the State of Missouri. They made their passage from Canada down to South America. As they passed over Missouri the huntsmen reaped a harvest, and it became necessary in the conservation of the wild fowl to do something about it. The Congress of the United States passed a law saying that it was illegal to shoot those birds in their migratory flight.

A case was brought by the State of Missouri on the basis that there was no grant of power in the Constitution that gave the Congress the right to legislate on so purely a local concern. The case went to court and the State of Missouri won the case in the lower court. At that time Mr. Davis, the Solicitor General, got in touch with the Secretary of State and said, in effect, "Don't press that case. Don't take it to the Supreme Court, because if you do you will lose it." He counselled that there was indeed no Constitutional grant of power for such legislation and the Congress had no right to pass such a law, but there was a way to do what they desired to do. He suggested that the Secretary of State negotiate a treaty with Canada covering these birds in their flight, and then come back to the Congress which under subsection 18 of Section 8 of Article I could then validly legislate on that subject. You will recall that that subsection says that the Congress shall have power to make all law necessary and proper to carry into execution any power granted to any department or officer of the government.

That advice was taken and the treaty was made with Canada. The case was brought and finally went to the Supreme Court of the United States. The two doctrines I have spoken of arose at that time. In the first place, Mr. Justice Holmes in that case hinted broadly that there was no limit on the right to make a treaty or the subject matter of a treaty, and if a treaty was made under the authority of the United States, no matter what its contents, it would be valid. It also established the doctrine that the Congress after the formation of a treaty acquires through the operation of the "necessary and proper" clause powers which are denied to it under the grant of power in the Constitution.

In the case of Ware vs. Hilton, decided as far back as 1796, Mr. Justice Chase expressed somewhat the same doubt as to whether or not any limitation upon this vast power did in fact exist. Indeed, some people today point to the case of Ware vs. Hilton as being a direct and continuing threat, since 1796, to rights and liberties of the people. That case, ladies and gentlemen, involved a very simple proposition. I think undoubtedly it could be said to deprive American citizens of their property without due process of law.

In the Ware vs. Hilton case it happened that when we adopted our Constitution the founding fathers thought it was necessary to take care of certain claims by British creditors that had been incurred prior to the Revolutionary War, and which had been protected by Article IV of the Treaty of Paris, which ended that war. A valid statute of the State of Virginia provided that any creditor of a British subject who would pay his money into the State of Virginia to aid in the prosecution of the war would get a good release and acquittance therefor. One Hilton and Company did pay some $3,000 to the State of Virginia under that statute.

At the conclusion of the war the Treaty of Paris was made, providing that there should be no hindrance either on one side or the other to the collection of just claims arising out of trade and commerce prior to the war. The Supreme Court decided that the treaty was the supreme law of the land, and even though Hilton and Company had made one payment they must make a second payment. This most certainly deprived them of their basic rights and took their property without due process of law. That is why many thoughtful lawyers have felt that case has always posed a threat to the rights of the people.

Since the elaboration of the doctrine of Missouri vs. Holland and Ware vs. Hilton and the other cases to which I will refer, I think we can make out a case that shows something must be done in the direction that we are trying to take.

There is another startling case, the Curtiss-Wright case. In that case Mr. Justice Sutherland presented the view that the treaty making power was not only without limit, but that it did not arise through grant in the Constitution and was, rather, inherent in the federal government. Such a statement as that, of course, is tantamount to saying that we could make a treaty on any subject, and whether or not it violates the rights of the people is of no moment so long as it is made under the authority of the United States.

Mr. Justice Hughes in 1929 spoke upon this subject. At that time, in an address to the American Society of International Law, he said that there was no explicit limitation on the treaty making powers and that he would not care to voice an opinion as to an implied limitation, as the Supreme Court had already expressed doubt as to whether or not there was such a limitation. Most certainly Mr. Justice Hughes was referring to the case of Missouri vs. Holland.

We also find, to show the extent of the problem we are now dealing with, a holding in one of the lower federal courts that when the President and the Senate enter into the field of foreign relations and make a treaty, that is something over which the judicial arm of government has nothing to do because the President and the Senate under the Constitution are the persons who formulate treaties, the Executive making the treaty and the Senate ratifying it. Therefore, when it is once made it is of no moment to the Judiciary. We also find that there never has been a treaty made under the authority of the United States that has been declared unconstitutional.

It is not hard, ladies and gentlemen, in the face of that record to understand why Secretary Dulles less than a year ago said, at Louisville, Kentucky, while addressing the American Bar Association:

"The treaty making power is an extraordinary power, liable to abuse. Treaties make international law and also they make domestic law. Under our Constitution treaties become the supreme law of the land. They are indeed more supreme than ordinary laws, for Congressional laws are invalid if they do not conform to the Constitution, whereas treaty law can override the Constitution. Treaties, for example, can take powers away from the Congress and give them to the President; they can take powers from the state and give them to the federal government or to some international body; and they can cut across the rights given the people by the Constitutional Bill of Rights."

I must say that Mr. Dulles when he appeared before our subcommittee in connection with the several amendments that we then had before us very substantially "watered down" that statement. However, Mr. Dulles to this day has never said that this problem does not pose a real threat to the rights of the people of America. I had some little colloquy with Mr. Dulles while he was before our committee. He thought that we should delay and take another look at this matter. However, I shall refer in just a moment to some things that make me believe that is not the wise course. I feel we should now go ahead and go ahead without further ado and put this Bill of Rights into the Constitution of the United States.

What is the practical application of these various principles and cases that we have been talking about? You all have heard much about the many conventions made up by the United Nations and its many and varied agencies. I am not going to talk to you about those conventions. I am going to talk to you about two conventions that have become treaties and point out to you, if I can, the application of what we have been talking about.

We have the United Nations charter, which of course has been ratified and is a treaty. We also ratified last year the Bogota convention, or the charter of the Organization of the American States. Both of those charters run the entire gamut of human activity in the civil, political, social, economic and cultural fields. If Missouri vs. Holland means what it says—and I see no reason why it does not—with either one of those treaties as a base the Congress of the United States today can legislate on any one of those matters. In other words, if a case went to the Supreme Court today arising under those conventions, dealing with the most intimate details of the daily lives of all of us, that treaty would have to be held valid, because having the treaty upon which to build, the Congress immediately acquires the right to legislate on those subjects of social legislation, which it does not possess under the Constitution standing alone.

How can we remedy that situation? It has been suggested that we pass what is now known as the Bricker resolution. I am happy to tell you that the subcommittee of the Senate Judiciary Committee has reported out to the full committee the Bricker Resolution. The full committee meets tomorrow morning at 10:30 a.m. I think I can confidently tell you that the full Judiciary Committee will report to the Senate S. J. Res. 1.

S. J. Res. 1 has for its purpose two things: First, it says that the provision of any treaty that conflicts with the Constitution of the United States shall be null and have no effect. The next thing it says is that no treaty shall operate as internal law except through legislation which could have been passed in the absence of the treaty. In other words, the resolution legislatively reverses the Supreme Court and takes away from the federal power, power that it gains by pulling itself up by its own bootstraps.

In closing I want to tell you how important for another reason it is that that resolution be passed. We have heard many people say that this problem can be solved by putting reservations in these treaties. Let me point out to you first that the United Nations charter, Article II, paragraph 7, says, "Nothing contained in the present charter will authorize the United Nations to intervene in matters which are essentially within the jurisdiction of any state."

The Bogota convention, ratified by the Senate on August 28, 1950, had this to say: "That the Senate gives its advice and consent to the ratification of the charter, with the reservation that no provisions shall be considered as enlarging the powers of the government of the United States or limiting the powers of the several states of the federal Union with respect to any matters recognized under the Constitution as being within the reserved powers of the several states."

Ladies and gentlemen, that is very fine language and it sounds like it ought to be some protection to the people in their rights. However, it amounts to just exactly nothing because under the construction that has been given to the Constitution by the Supreme Court of the United States in the Missouri vs. Holland case—and as I have said before I believe that case was well decided—the Congress of the United States immediately upon the formation of a treaty has the right to treat with the subject matter involved no matter what the treaty says. You cannot deprive the whole Congress from legislating under the Constitution simply because the United States Senate says it shall not do so.

So there is the ever present threat, until this resolution is actually adopted and becomes a part of the Constitution, that under the Bogota convention or under the United Nations charter, that some legislation will be enacted by the Congress which it could not have enacted except for those treaties.

I therefore say to you that I know you have always given your full support to the Bricker resolution. I commend you for that. I know the members of our committee who will carry the fight on the floor of the Senate will be waiting to get the support that we know the American Medical Association will give us.

Presented before Conference of Presidents and Other Officers of State Medical Associations, New York City, May 31, 1953.

Voluntary Health Insurance—An Appraisal and a Look Ahead

CARROL M. SHANKS

President, The Prudential Insurance Company of America

I am very appreciative of the opportunity to talk to you this afternoon—particularly so since you and the state medical societies you represent will be such potent factors in determining the future course of voluntary health insurance in America.

It is, of course, no new thing for doctors and insurance people to be discussing a common problem. Each day the profession and the industry make thousands of contacts one way or another. The imprint of the medical profession on insurance is a heavy one. You aid us in the selection of risks, your work underlies our mortality and morbidity tables, and your assistance is essential to the disposition of many of our claims.

There are probably few places where the achievements of modern medicine are more clearly revealed than in the accumulated experience of insurance companies and in the mortality tables they employ. A review of the causes and frequency of death at the various ages made at twenty-five year intervals from seventy-five years ago to this day would at each quarter century date disclose notable advances. There come to mind readily the great reduction in infant mortality and in deaths during the childhood years. Discovery of specifics for such things as diabetes and pernicious anemia, the advances in chest surgery, the great ex-

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tension of the field within which surgeons by reason of greater skill and better preoperative and postoperative care may operate, the lives saved by the sulfonamides and penicillin and the effective use of blood and blood plasma—these are but random samples and could be easily multiplied. In looking ahead we see the broad attack now being directed against the degenerative diseases which by reason of the earlier advances now loom so formidable. In connection with this matter of degenerative diseases, I am glad to be able to tell you that the life insurance industry for the last eight years has been actively promoting research having to do with the disease of the heart and arteries. More than five and a half million dollars have been contributed thus far. Two hundred and five separate programs have been supported and 241 research fellowships established.

This story of medical advances is an old story to you but almost necessarily rises afresh in the mind of an insurance man seriously considering the relations between medicine and insurance. Of course the practice of medicine and the effective distribution of medical care are both open to constant improvement, as just one good backward look will indicate. The road in each case stretches endlessly ahead, but the record already written is outstanding and entitles the physician to the gratitude of the nation. All over the world the quest for better health and the effort to prevent needless loss of life proceeds. A glimpse of this general scene only serves to emphasize how fortunate we are as a people in the kind and quality of health care already available to us.

It so happens these major medical advances have been made without the aid of prepaid care as we know it. This being so, it is easy to understand the occasional irritation of doctors caused by the use of the words "health insurance" in a fashion indicating that health insurance is the equivalent of health care itself. In other words, the inference is raised that so many dollars of health insurance will automatically buy so much improved medical care. Voluntary health insurance can ease the financial burdens of individuals and families, and its existence in many instances will result in the obtaining of better medical care. But the words are not interchangeable and primarily the improvement in care must come from the physician.

Now I should like to make with you a brief appraisal of voluntary health insurance as it stands today. What has been accomplished thus far? And is this movement deserving of our continued interest?

One major test is the number of people covered. The last complete figures I have dealing with medical, surgical and hospital expense insurance—the areas covered by insurance companies and Blue Cross and Blue Shield—are Health Insurance Council figures as of December 31, 1951. At that time it was estimated that 85 million people were covered for some form of hospitalization insurance; about 41 million by Blue Cross and Medical Society plans, and about 45 million by insurance companies. For surgical expense insurance covered about 65 million persons; about 24 million by Blue Cross and Medical Society plans, and about 41 million by insurance company plans. And for medical expense insurance about 26 million people; 14 million by Blue Cross and Medical Society plans and about 12 million by insurance companies. Duplication of coverage prevents the presentation of precise figures as to individuals covered, but the figures are about as indicated. Tentative projections carrying these figures to the end of 1952 indicate that the total coverage at the time probably amounted, in the case of hospitalization, to 90 million covered; in the case of surgical expense insurance to 72 million covered, and in the case of medical expense insurance to 32 million covered.

These figures standing alone constitute a noteworthy achievement. Actually, however, these figures deal only with the coverages in the areas in which the insurance companies and Blue Cross and Blue Shield all are active. There is outside this area and provided either by insurance companies alone or other private plans substantial protection which directly or indirectly supplies a considerable sum of money to meet health care expenses.

As long ago as December 31, 1951, there existed independent private plans such as industrial, community or consumer plans, or private group clinics or university health plans which provided hospital care for three and a half million people and provided surgical and medical care for 2,700,000 people. These figures today are undoubtedly larger.

The insurance companies provided loss of income benefits for varying periods for 31 million wage earners at the end of 1951 and approximately one third as many persons were covered through paid sick leave in private industry or in civilian government service, union administered plans and employee mutual benefit associations. These funds which meet the basic need of replacing a portion of the wage earner's income during sickness make possible the payment of doctor bills and hospital bills that otherwise would not be paid as promptly or, in many instances, at all.

There are, in addition, considerable sums paid under workmen's compensation policies, under total permanent disability benefit provisions in life insurance policies, under commercial accident policies issued to 4,800,000 persons, under group accidental death and dismemberment insurance issued to about nine and a half million people, and under commercial accident policies covering specified risks in the case of eight million people.

And then there are the very large sums approximating several billion dollars yearly paid out under life insurance policies. Little of this money goes direct from insurance companies into the hands of doctors as it is primarily utilized for general family living expenses and to achieve family aims. However, general family living expenses and general family aims these days include sizeable payments for hospital and medical care charges. Thus, life insurance in an unknown but very appreciable amount also enters the picture.

From this recital it can be seen that there is a very considerable amount of insurance protection which, although it is not always thought of as so doing, buttresses the voluntary health insurance program.

In considering the proportion of the population covered, it is also to be remembered that there are people, probably relatively small in number, who have no need of insurance protection. There are also a very considerable number of persons such as service men and other beneficiaries of governmental programs for whom adequate medical and hospital care is already available should they choose to accept it. So this field that we must cover is not as large as it is sometimes stated to be.

Thus rather an amazing start has been made in enlisting public participation in the voluntary health insurance program. This view is strengthened by consideration of the fact that hospitalization and surgical expense insurance in volume, as we now think of it, had its biggest growth commencing in the '40s and that medical expense insurance has had its greatest growth since the last World War. How many voluntary conceptions have progressed as rapidly?

The plans themselves are much more adequate. It is true that many plans do not satisfactorily meet present day medical and hospital costs. It is also true, however, that in connection with a large share of the business, upward revisions of the plan have already been effected and that this process continually goes on and that the level of benefits on the whole has steadily risen. Furthermore, the inflationary problem of recent years had made the job of catching up much more difficult. Moreover, it should be remembered that when some of these plans are written, the choice facing the insurance companies is not between writing an adequate or inadequate plan, but between writing a less than adequate plan or none at all. Under these circumstances it seems best that some start be made by developing some immediate protection. Many of these plans are later increased. Employers and individuals, moreover, on occasion have just so much to spend, and they insist on splitting the money thus available between medical, surgical and hospital protection on the one hand, and protection in the field of life insurance or loss of income or for some family purpose unrelated to insurance.

We have been dealing with the number of persons covered and the level of benefits. Voluntary health insurance by reason of the experience of the years has been the gainer in other fields.

We are possessed of a knowledge and resourcefulness we did not have when we started. When we started in, we had but few trained men. Today, though the supply of trained people is still inadequate, all the voluntary plans do have many people—actuaries, salesmen, clerical staffs, administrators, executives, claim people—substantially trained to meet the problems of the future.

Then we have preserved our freedom of action and our right to experiment. No monopoly has developed, and each major insuring agency has acted as a stimulus to the other agencies to provide more attractive plans and improved service for the public. Blue Cross and Blue Shield plans and insurance company plans are all probably better than they would have been had these agencies not acted as a spur to one another. Some of the other private plans will undoubtedly act as a stimulus to these three groups in turn.

In earlier days we were selling to a public largely unacquainted with the benefits voluntary health insurance could provide. Today we have a public which is much more aware of the value of our products and one which has had the benefit of a practical demonstration of that value by the payment of millions of claims.

We have now reached the point where I should like to look ahead with you and consider some of the problems of the future, and give thought as to how we can make voluntary health insurance still a more effective social instrument for good.

The problem has so many aspects—political, social, insurance, medical—that I could not begin to cover them all. I will therefore discuss with you a few general matters and some problems and matters of particular concern to insurance companies and doctors.

In the problem field we must continue to vigorously press and expand the sale of voluntary health insurance. My company, which has been issuing the group coverages for years, entered the individual and family hospital and surgical and income fields a little less than two years ago, largely because of the feeling that we must all do our part. Numbers of other insurance companies have entered the field as well.

Moreover, we must not only do more in the fields which have hitherto received principal attention at our hands but will now be obliged to direct a large share of our work to the more difficult areas. We shall have to deal more effectively with the problems of the older persons, the persons not presently reached by insurance companies through their group plans or by Blue Cross or Blue Shield. We shall have to deal with the retired person and with the problem of chronic illness and major medical expense. The problem of increasing diagnostic service will probably loom larger. Just how far the insurance principles can be utilized in all these fields remains to be seen. Encouraging starts have, however, been made in a number of these areas as in the case of older persons and retired persons, and the ingenuity and experience we have gained will do much to aid in the solution of these problems.

Substandard risks are satisfactorily cared for by group insurance. Here there is no need for evidence of insurability, but a substandard case in individual accident and health insurance is more difficult. Here again we must seek to move forward.

One of the basic needs, and probably the one on which the success of voluntary health insurance depends more than any other, is that there be effective cooperation in the public interest between the insuring agencies and the medical profession and the hospitals who furnish the necessary services. I do not believe the importance of this factor can be overestimated. There are many reasons why this is so. We are, for instance, moving into an era of prepaid care. This will obviously produce a greater utilization of facilities than is the case in a population without such insurance. Some of this increased utilization will be good, namely, that which results in necessary care being provided where it would not have been provided without the existence of prepaid coverage. On the other hand, possession of such coverage will undoubtedly produce in certain cases an over-utilization of its facilities merely because the coverage is present. Those who write the insurance and those who provide the service will both have an interest in facilitating the increased utilization in the one case and restraining it in the other. Such restraint as occurs will not have as its object primarily the saving of money but the preservation of the basic plans for those who need them. These could easily be destroyed and priced out of the market.

We need deeper recognition of our joint obligation to the public. In other words, it is not enough that we just properly handle our own end of each situation. A man in a hospital, for instance, under doctor's orders is not three different persons with three separate problems, but one man with one three-sided problem. Soliciting the support of the public and proclaiming the superiority of voluntary insurance, as we do, we can do no less than cooperate together to see that our joint handling of his case shall be made as easy and as convenient and as understanding as possible. The patient is a whole man, and he is justified in demanding that he be treated as such. And we will be wise to heed that demand.

One of the prime problems confronting us is, of course, that we furnish the full and more adequate benefits demanded by the public at reasonable cost. The physician must and should be adequately compensated for his work, and our plans must be kept financially sound—not only for ourselves but for the participants in the plan. But we must still see that the job is done at a cost which the patient may reasonably be expected to pay. Should we fail to meet the reasonable expectation of the public in this regard, the solution will not be abandonment of public demand for adequate coverage but a turn to some governmental operation.

The need for what I have been talking about is readily seen in the problems involved in furnishing protection against major or catastrophic medical and hospital expense. Today companies are actually pushing the sale of coverages providing for losses up to two or five or ten thousand dollars. This is an area in which there have been repeated cries for assistance. Now we are trying to do something about it, but there can be no hope of successfully doing so unless costs and charges are kept at their true level. One part of the problem we try to solve by making the insured a co-insurer which makes him a part payer of the bill. The other principal safeguard must be the sympathetic and understanding of the insurance principles involved on the part of those who furnish the service and their personal integrity in giving that understanding practical effect.

Should insurance fees merely be utilized to increase the cost of insurance, the whole purpose of taking out the insurance is defeated and sooner or later the scheme must fall to the ground. The doctors of course have been confronted with the same inflationary problem as all the rest of us, and, as I have said, any system must see that they are properly compensated for their work. But, as I have also said, if insurance which was taken out with the specific purpose of meeting all or a certain portion of a medical bill is converted into the basis for increasing that bill, the desire to plan for and anticipate medical costs is greatly lessened, if not destroyed.

A great deal of educational work has been done. Insurance people better understand medical procedures and practices, and doctors better comprehend some of the basic insurance principles. But a much more thorough job needs to be done in this respect, and the matter must be gotten home to more insurance people and to many more doctors. A voluntary insurance system moves only through the direct efforts of the people who believe in it. There is no outside directing force, nor any feat of legerdemain that will do this job for us. If we are to move in this field, it means that literally thousands of insurance people and the doctors at the local level will have to have a better understanding of the principles involved in the successful operation of voluntary insurance and will have to see the need for proper support of things that are in the public's interest.

While I shall not dwell on it, just the mechanical work necessarily involved in the payment of claims makes it desirable that we establish systems that are easy and as effective as possible.

Generally speaking, I have found medical men keenly interested in the spread of voluntary insurance and anxious to encourage all able and honest agencies working in the field. I must confess, however, that I am somewhat surprised to occasionally find doctors and societies who do not see the need for according substantial equality of treatment in the matter of charges to policyholders of insurance companies and participants under Blue Cross and Blue Shield plans.

I have no doubt of the sincerity of the views of most such men and of their understandable attachment to a program which has been so very beneficial and which they may have originated or of which in any event they plan an active part. Nor is any criticism intended of the great service performed by them.

However, I should like to advance for your consideration the suggestion that the view thus taken fails to take full account of the obligation to the purchasers of voluntary insurance or of the true interests of the medical profession itself.

The medical profession has sought and sought successfully thus far to maintain its independence and to maintain a system preserving the right of the patient to a free choice of a physician and to avoid having its fees set for it by government. The stronger and broader the existing voluntary insurance system the better position the medical profession will be in to maintain these principles.

Is the freedom thus accorded to the medical profession to be utilized to deny to others a free unregimented choice as to how they should choose to meet their medical costs?

The profession pled for public support in its fight against compulsory health insurance. It sought the support of its patients and the general public. It sought to encourage the spread of voluntary insurance in every possible sound manner. Does it now wish, after having obtained such support, to deny equality of treatment in the matters of fees to anyone who obtains his protection other than through certain specified agencies however beneficial they may be? In other words, is voluntary insurance to be voluntary or only theoretically so?

It has been the pride of the profession through the years that all people in the same financial circumstances and in the same degree of physical and mental distress shall receive the same treatment—medical treatment and financial treatment. Is that a standard from which it is wise to wander?

Just a few additional brief words. We now have an administration in Washington inclined to look more favorably on private attempts to solve the problem of medical care costs. We will be wise, all of us, to work on this problem now. We will be wise, furthermore, to recognize that this means you and it means me. If we have too many other things to do, or if the organization we represent can spare no time for this, then we can hardly be heard to complain when other means are sought to accomplish these aims. All the good will in the world will not have the value of a sound bit of constructive work.

We have come a long way with voluntary health insurance. Many problems and much work lies ahead, but I am sure that we can all take heart from what has been accomplished thus far. Above all, let us keep our thinking broad and our sights high. Let us remember that we all exist—doctors, hospitals and insurance agencies—simply as a mechanism through which the public can best achieve its purposes, namely, better health care and a better and more satisfactory method of financing the cost of that care. If we keep our minds on these essential purposes, cooperating where we properly may to achieve them better, we will not be needlessly diverted or divided by unimportant and lesser matters, and we shall the sooner realize our goal.

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Water Fluoridation

Report of the Committee of the St. Louis Medical Society

Summary

1. Fluorine is an element existing widely in food and water, varying in its concentration in the latter from traces to excessive amount. The fluoridation of a communal water supply entails only supplementing a deficient natural concentration. There is no way of proving by chemical test that the element, fluorine, exists in the same chemical combination in its natural concentration as results from its addition in whatever salt of fluorine is chosen. From chemical theory, however, and from all observed facts of its behavior, the inference is plain that the soluble fluoride ions are equally effective at a given concentration, however introduced.

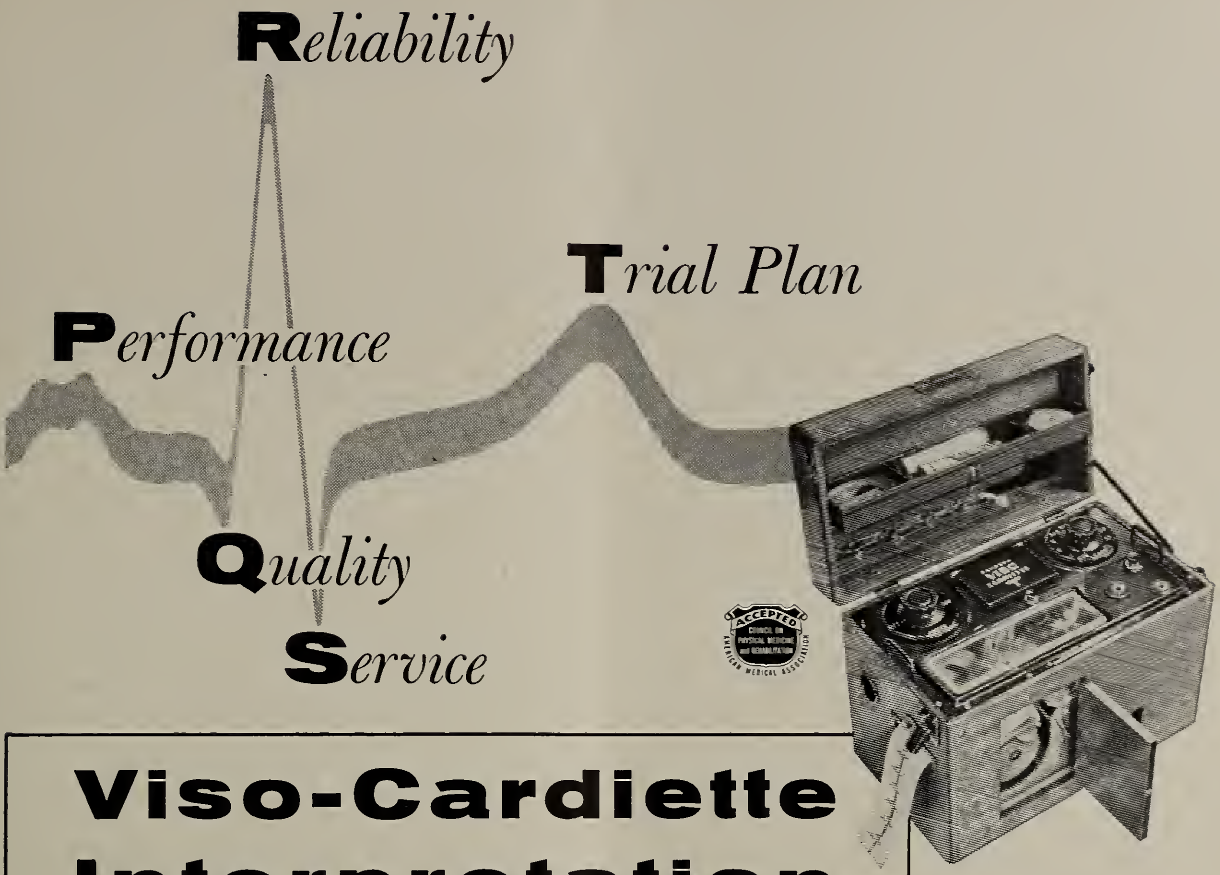
2. There is an inverse relationship between the concentration of fluoride ion in the water supply, whether naturally occurring or the result of the supplement, and the incidence of dental caries. This has been proven by observation of inhabitants of many communities and is accepted widely by those who oppose fluoridation for reasons other than its effectiveness. The proper amount to be added as supplement for a given community is arrived at in recognition of the experience of dental caries in the school children, the naturally occurring concentration of fluoride ion in the water and the climatic conditions peculiar to that locality which influence the intake of water. The benefit to be expected can best be stated by members of the dental profession and local public health officials, and will be in proportion to the prefluoridation caries experience of that community. While fluoridation importantly reduces the incidence of caries, it does not completely eliminate it and does not diminish the need for adequate diet, mouth hygiene and dental inspection at proper intervals. While fluoridation begins to show its effects in a year or two in school children, the maximum benefit is seen in those persons using fluoridated water from birth. The increased resistance to caries extends at least into middle life, hence it is incorrect to assert that only children are benefited by such a program.

3. At the levels of intake supplied in fluoridation programs, there is practically no storage of fluorine except in the teeth. The ideal daily amount is about one milligram in temperate or predominately cool climates and would be obtained by drinking one quart of water containing 1 part per million of fluoride ion. Storage elsewhere in the body has not been demonstrated with daily intakes of as much as three or four times that amount. Storage in bone apparently occurs with daily intakes substantially above 4 mg., though without demonstrable ill effect on persons who have lived all their lives with a water supply containing 8 parts per million of fluoride. A wide margin of safety is thus provided, inasmuch as intakes of fluorine about fifty per cent above the ideal dose produce very mild evidences in the appearance of the teeth of such excess. These dental warnings are detectable only by expert examination and are in no way harmful to the teeth. There is no published record of any injury to the health of any person drinking natural fluoridated water with a concentration as high as 8 parts per million, nor of harmful effects at such lesser concentrations as occur naturally or are provided in fluoridation programs. No injurious effects can be found in the study of vital statistics of all the common major diseases, including cancer, or in the statistics of maternal and newborn death rates. Experimental studies on man (the most sensitive species) and lower animals confirm these evidences of the safety of a fluoridation program. Physicians practicing in areas which have had fluoridation programs for three years or more report that their experience in the treatment of the sick does not differ from their pre-fluoridation practice and that they do not forbid the use of fluoridated water in any case.

4. The public health and water engineering practices are relatively simple. They include selection of the most desirable compound of fluorine to be used, provision for safety measures for handlers of such chemicals, installation of feeding equipment and regular performance of chemical tests at various points in the distributing system in order to regulate the desired concentration. Annual cost in most communities has varied between nine and fourteen cents per capita.

5. An impressive roster of persons and organizations of recognized scientific standing has endorsed the efficacy and safety of fluoridation. Over 3,000,000 persons live in areas whose natural water supplies contain from 0.0 to 5 parts per million of fluorine. Testimony has been furnished from the physicians of twelve communities with a combined population of nearly 800,000 persons who had fluoridation programs for from three to seven years as of January 1, 1953. As of August 1, 1953, 772 communities in 43 states, including 10 major cities, have fluoridation programs serving a total population of 14,000,000 persons. In the United States, such widespread adoption of any program of preventive medicine, determined upon at the local level has profound significance as to the solid merit of the proposal.

6. Testimony in opposition to fluoridation has been expressed by a numerically tiny minority of persons of undoubted scientific training and experience in relevant fields. Close examination of their testimony reveals that they do not usually question the effectiveness of the procedure but have reservations as to possible toxic effects. They do not lay down criteria by which they would judge a fluoridation program to be any safer than it has already been shown to be. In requiring an indefinite prolongation of presently established programs before extension to other areas they tend to disregard what has already been learned. There is also an active, proselyting opposition that does not represent an objective, scientific point of view at all. It seeks to defeat proposals for fluoridation by the circulation of pamphlets containing obsolete or discredited or irrelevant charges ranging from "Operation Rat Poison" to "communistic plot" themes, with a measure of food faddism for good measure. There is no authoritative expression of opposition from any religious sect nor from the representatives of any school of healing the sick which is recognized by law in Missouri.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7. There are no practicable alternatives to fluoridation of water in a city such as St. Louis. The provision of fluorine intake through tablets, milk, salt or other means has profound disadvantages peculiar to each one. Topical fluoride application directly to the teeth by skilled personnel cannot be applied universally as a public health measure for the prevention of dental caries, insofar as it is effective, due to lack of personnel and funds. While somewhat less effective than fluoridation of the water supply, it has merit as an alternative public health measure in small communities without such a common source of water.

8. The use of water containing the recommended concentration of fluorine has been shown to be without hazard in the industrial use of water. There is testimony to this effect by research chemists of the associations of brewers, bakers and bottlers as well as by use of naturally fluoridated waters in earlier times without dissatisfaction. Such fears as have occasionally been expressed have not been documented and appear to be contrary to observed fact. There has been no recorded, open opposition to this measure of preventive medicine from any industry, nor is any to be anticipated in the future.

9. The power of a municipality, acting through its elected representatives, to initiate fluoridation of its water supply by legislative action has been upheld wherever challenged in court. Such a procedure is held to be proper exercise of police power of a community to conserve or improve the health of its residents. A fluoridation program does not treat caries already present. It is effective in increasing the resistance of the developing tooth to the occurrence of caries. "Preventive Medicine" is an obviously more accurate description of its purpose and effect than is "Mass Medication," usually introduced acrimoniously.

10. No other public health measure has had more thorough study prior to adoption than the proposal for fluoridation of the community water supply whose natural concentration of fluorine is deficient. The ideal concentration of fluoride ion to be delivered at the outlets should be decided by the responsible public officials after study of current information, particularly of climatic effects, and after such consultation with other authorities as they deem necessary. Continued studies and periodic reporting of the caries experience of selected groups of children, as done at present in St. Louis, together with careful scrutiny for incipient signs of dental effects of excessive fluorine ingestion should be carried out as an essential feature of such a program.

Recommendation

The members of the Water Fluoridation Committee of the St. Louis Medical Society unanimously recommend that the elected officials of the City of St. Louis undertake without delay the necessary legislative and administrative steps to authorize and initiate a program to increase the content of fluorine of the municipal water supply to an amount whose concentration will provide maximum reduction in the incidence of dental caries of the children of St. Louis commensurate with freedom from objectionable cosmetic effects or hazard to health of the residents as a whole.

This recommendation is made in the conviction that such a step will constitute the most significant contribution to the public health of the community since the enactment and implementation of the Smoke Abatement Ordinance.

(Signed)
Harold A. Bulger, M.D.
Raymond O. Muether, M.D.
Willard Bartlett, M.D., Chairman

August 24, 1953

Study

The pathways by which the human body absorbs the fluoride ion in ideal dosage and rids itself of all but a small fraction are well understood. It is essential that one comprehend these mechanisms for with such knowledge as a foundation, the facts and fallacies involved in programs for the fluoridation of a water supply lose much of their mystery for the lay student. Definition of the "ideal" daily dose is the first step. In medical terms, it is the physiologic dose. As with many other substances having valuable properties when administered in a properly prescribed daily amount, fluorine becomes a harmful, rather than a beneficial agent when given in excessive, or toxic, quantities. This is equally true of iodine, bromine and chlorine, the other members of the family of chemical substances known as the halogens. They are widely distributed in animal and plant life and most naturally occurring waters contain them in varying concentrations. In physiologic concentration, for example, chlorine combines with sodium to form the largest portion of the salts in solution in the blood itself. In a different combination and concentration, it exists as the hydrochloric acid which is the principal chemical agent in digestion of food in the stomach; it is administered by mouth throughout a life time to patients whose own digestive juices are deficient. In still other concentrations and chemical combinations chlorine is used to prevent the growth of harmful germs in water supplies and, in murderous form, it is the principle component of war gas. Common table salt is the same chemical substance as the sodium chloride in solution in the blood and tissue juices, yet excessive intake of salt, or *no* intake of salt, produces grave illnesses; the same statement is true of excessive or inadequate intake of water alone, yet water makes up about 70 per cent of the weight of the human body.

In considering the effects upon the human body of a given element, therefore, one must define not only the chemical compound itself, but the concentration in which it is to be delivered, the total daily dose and the period of time over which it is to be administered. For the fluoride ion the ideal, or physiologic, dosage is approximately 1 milligram (mg.) per day which is achieved by the human utilization of drinking water and water used for cooking from a source containing an average concentration of 1 part of fluoride ion per million parts of water (1 ppm). This intake of fluoride is calculated as a proper addition to the small amount contained in various solid foods. The needs of the body for water are fixed by nature and, although habitual intakes of drinking water, or of substances dissolved in water, vary widely with the individual, the differences are not significant in altering importantly the effects upon the human body of these small quantities of fluorine. Since few naturally occurring waters are completely free of fluorine, one should always think of a fluoridation program, not as addition of a substance foreign to the water, but as a process of supplementing an inadequate concentration. In many communities in the Southwestern States programs of defluoridation have been instituted in order to remove an undesirable excess of fluorine and to lower its concentration, not to zero, but to physiologic levels. It must be understood, moreover, that it makes no demonstrable difference to the human body whether the ideal concentration of fluoride in its water supply has been achieved naturally, by supplement or by defluoridation. Whatever chemical combination of fluorine, the element, is dissolved in water as fluoride ion and is measurable by standard tests is capable of absorption by the body.[1, 2, 67]

Fluorine is properly considered to be one of the "trace" elements normally present in very small amounts in the human body. Its usefulness in increasing the resistance of the teeth to decay (dental caries) has only become obvious in recent years and will be elaborated subsequently. In physiologic dosage, very small amounts of fluoride are stored in the enamel of the teeth of infants and children before hardening of the enamel is completed and particularly before the permanent teeth have erupted into the mouth. In physiologic dosage, storage of fluoride ion elsewhere in the body has not been demonstrated. The remainder is passed (excreted) from the body in the urine, sweat and feces.[2, 3, 4] There is, as yet, no other known beneficial role which such small quantities of fluorine play in the human economy. The ideal, or physiologic, dosage of fluorine is therefore that amount, in the concentration and quantity already described, which will importantly reduce the incidence of dental caries and which will not produce undesirable effects. In temperate climates the year-round ideal concentration in a water supply has previously been stated to be 1 ppm. The permissible upper limit has been set as 1.5 ppm,[5] for with even moderately higher concentrations of fluorine no considerable added protection against dental caries is seen[6] and an undesirable cosmetic phenomena fluorosis (noticeable brownish mottling of the enamel), begins to appear in a small percentage of people. No documented instance of damage to health has been recorded from the use of water containing the physiologic dosage of fluorine, whether naturally occurring or supplemented, no matter over how long a period.[4, 7, 8]

It has already been stated that variations in the total daily intake of properly fluoridated water do not produce "important" alterations in physiologic effects. This needs qualification, for seasonal concentrations should be related to the ideal, year-round concentration of 0.9 to 1.5 ppm of fluoride ion for a temperate climate. Climate plays a part in determining the total fluid intake of the population. It is important to remember that about 90 per cent of the weight of a solid, general diet lies in its water content and added liquid is drunk to make up the body's need for total daily water intake; water is made available by the body for the formation of urine *only after* all the other needs for water, including the formation of sweat, has been met. In warm, humid periods of the year the need for water is increased and it has therefore been the logical practice in communities with a fluoridation program to reduce the amount of fluoride added to the water supply in order to produce a concentration at the outlets of as little as 0.6 ppm under such climatic conditions, raising the latter to 1 ppm or slightly higher during cool weather.[9, 10]

Allusion has been made to the fact that with increasing concentrations of fluoride ion cosmetically undesirable mottling of the enamel appears in increasing percentages of children who have been on such an intake from infancy. This is noticeable to the untrained observer and persists throughout the lifetime of the individual; no harm to the structure of the tooth is involved. Such grossly noticeable mottling does not occur with ideal concentrations which are appropriately adjusted downward in spells of hot weather. Under these circumstances, less than 15 per cent of children at ages 12 to 14 years develop a very faint change in color of the enamel, localized on various surfaces of the teeth and detectable only to the trained observer using instruments and special illumination.[7] There is, therefore, no cosmetic hazard with physiologic conditions of fluoridation, natural or planned.

The warning sign that the ideal daily intake is being exceeded lies precisely in the appearance of dental fluorosis, mottling of the enamel, as concentrations of fluoride ion in the water supply are increased. The large margin of safety is apparent when one reviews the incontrovertible evidence that water containing 8 ppm has been the only source of supply for the community of Bartlett, Texas, during several generations without detectable evidence of injury to health upon searching scrutiny of the population.[11] Aside from mottling of the teeth, increased bone density in x-ray examination in 11 per cent of the persons examined was the only deleterious effect found; it was not associated with symptoms and constituted the only way except for dental effects in which these people were found to differ from the inhabitants of a neighboring community with inadequate amounts of fluorine in the water supply. Completely reliable data[12] reveal that water *naturally* containing 1.0 to 1.5 ppm is used by more than one million people. Water containing 1.6 to 2 ppm is used by more than 900,000 persons. Water containing 2.1 to 3 ppm is used by more than 600,000 persons. Water containing 3.1 to 5 ppm is used by more than 100,000 persons. Water containing more than 5.1 ppm is used by 40,000 persons. A total of 3,000,000 persons in the United States, then, have for many years been using water naturally containing fluoride ion in concentrations, variously, between 0.9 and 5 ppm and in none of them has an authentic case of injury to health attributable to the fluorine concentration been reported in the vast medical literature. The reasons why none is to be anticipated, even at these concentrations of as much as five times the ideal daily dosage, will be elaborated.

Before proceeding to comment on the published studies that have demonstrated the absence of a hazard to health in the use of water containing fluorine in concentrations even higher than the ideal, let us recapitulate briefly the observed facts presented hitherto for consideration:

1. The discussion of the effects upon health of any waterborn element must define a) the chemical combination in which it is to be employed, b) the total daily dosage, c) the concentration to which it will be diluted upon delivery at the tap, and d) the period over which it is to be consumed.

2. The ideal, or physiologic, daily dose of any substance is that amount which will produce the desired beneficial effect in a reasonable percentage of instances without doing harm.

3. The physiologic dose of the fluoride ion, judged

from the point of view of its dental effects, is approximately 1 milligram daily. This is attained in temperate climates by drinking water which has naturally a concentration of about 1 part per million of fluoride or to which fluorine has been added to approximate that concentration in communities where the water supply contains less than the ideal amount.

4. In physiologic dosage, fluorine is not stored in the body except for that very small amount that enters into the process of hardening the enamel of the developing teeth. The remainder is lost to the body, principally in the urine.

5. No evidence of injury to the well-being of any person, sick or well, infant or aged, has been related to fluorine present in water in physiologic concentration.

6. The teeth of persons receiving water containing physiologic concentrations of fluoride, properly adjusted to local climatic conditions, do not show discoloration.

7. At concentrations of fluoride rising above 1.5 ppm visible mottling of the teeth is observed with increasing frequency. This is undesirable from the cosmetic viewpoint.

8. The appearance of mottling detectable only by a trained observer in more than 10 per cent of children is an indictation that physiologic doses are being exceeded.

9. The margin of safety with concentrations of fluoride higher than ideal is so wide, that no sign of ill effects has been detectable by close scrutiny even of the members of one community using a water supply containing 8 ppm for several generations. Over 3 million persons in the United States live in communities where the natural concentration of fluoride in the respective water supplies is, variously, from 0.9 to 5 ppm. There is no medical record to show that, aside from relative freedom from dental caries, their health differs from that of persons dependent upon water containing less than ideal amounts of fluorine.

10. No distinction is to be made between the effects on the human body of fluoride ion naturally occurring in a water supply and the same concentration of fluoride attained by either supplementation or defluoridation.

It is not surprising that relatively few organized investigations of the health of persons living in communities whose water supplies have a physiologic concentration of fluorine, either naturally or by supplement, have appeared in the medical literature. Such inquiries into the possibly toxic effects of any substance in the natural water supply employed by a population are prompted either by 1) reports of damage to health in individual cases or 2) the publication of reports of laboratory studies on animals and human volunteers indicating that the behavior of the substance in the body under applicable conditions is such as to make it likely that evidence of injury to health in specific ways may appear and should be sought. In the total absence of such clinical or laboratory reports of health hazards with respect to ideally fluoridated water, few community health departments have found themselves so plentifully supplied with the taxpayer's money that they could divert funds and personnel to looking for trouble where none was to be anticipated. Such an effort is a luxury, comparatively, in view of the urgent needs and limited sums with which all departments of health and sanitation are chronically faced. The conscientious and highly trained members of federal, state and local public health professional associations study critically the investigations in their field and do not lightly or carelessly endorse proposals for preventive measures whose conceivable harm might outweigh the benefits. As will be brought out, there is a still larger body of published evidence as to the safety of drinking water containing higher than physiologic concentrations of fluoride and this has been the logical field for the most intensive study of the problem. Let us examine, then, the reports which bear on the safety to the consumer of drinking water containing fluoride ion in concentrations of up to approximately 5 parts per million.

The city of Newburgh, N. Y., was one of the first communities in this country to add fluorine (as sodium fluoride) to its natural water supply (1945) bringing up the concentration from 0.1 ppm to 1 ppm. Systematic continuing examinations of school children have been reported in respect to general physical examination, analyses of blood and urine, x-rays of the bones of the hands, forearms and legs and special eye and ear examinations in selected samples; detailed dental records have also been kept for comparison with the pre-fluoridation data obtained in Newburgh and in neighboring Kingston, N. Y., which had a similarly meager concentration of fluorine and from which fluorine supplement has been withheld for the sake of comparison. These studies have been carried out in conjunction with the New York State Department of Public Health. As reported in 1950[13] and again in 1952, we read: "Careful examinations carried on since the study started reveal absolutely no harmful effects from drinking fluoridated water."[14] Herman E. Hilliboe, M.D., Commissioner, New York State Department of Health, adds "These results bear out studies made in other areas of the country, where persons have been drinking naturally fluoridated water all of their lives with utmost safety."[14] No differences (other than dental) in the physical condition of the children of Newburgh and Kingston have been found; the dental benefits will be reviewed separately. The Evanston (Illinois) Dental Caries Study Group has also carried on regular examination of the school children since that community began to supplement (to 1 ppm) the negligible quantities of fluorine in its water supply in 1947. In a letter[15] dated March 9, 1953, Winston H. Tucker, M.D., Commissioner of Health of Evanston, writes: "No detrimental effects of any sort have been found in the children on careful examination. I am not aware of any evidence published in medical literature showing that there is an increase of any disease which could be attributed to fluorine in a concentration of one part per million in a public drinking water supply."

Studies on a somewhat older age group have been made by McClure (then Senior Biochemist, National Institute of Health, Bethesda, Md.). He has reported[16] observations of height and weight and the incidence of bone fractures in 1458 high school boys residing in communities whose water supplies varied from zero to 1.0 ppm fluorine content. There is no correlation of the fluorine content of the water with growth and development or with the experiences of fractures of bones, as is evident in Tables I and II.

The examination of vital statistics for any community is a standard method of finding clues as to the possible relationship between a given disease and a suspected agent, causative, contributory or complicating. From a series of published data,[17, 18, 19, 20, 21] Table III has been prepared. It demonstrates beyond dispute the lack of any regular pattern of relationship between death rates from all cancers and the fluoride content of the water (varying from zero to 4.5 ppm) in several communities. In Table IV is evident the same lack of correlation between the periods of survival of sufferers from several types of cancer and the fluoride content of the water in San Francisco, which had little or no fluorine, and in Denver, which has 1.2 ppm.[17, 18]

Tables V and VI[22] reveal the relationship of deaths of pregnant women and of babies before and after birth to the fluorine content of the water in several Wisconsin communities during two successive 5 year periods. The well recognized stresses of pregnancy and the sensitiveness of the developing fetus to changes in its environment could be expected to reflect toxicity if any such existed in the water supply. Yet there is no important or consistent difference in the frequency of deaths at term (still birth), immediately after delivery (neonatal), during the first year of life (infant) nor in the mothers themselves in the cities whose water supplies contain from 0.03 ppm to 2.5 ppm of fluorine. Nor is there any significant alteration of these patterns in the city of Sheboygan during the 5 year period following the raising of its fluoride concentration from 0.03 ppm to 1.2 ppm.

TABLE I

Comparison of the height and weight of 1458 high school boys, ages 15 to 17 years residing in cities with different concentrations of fluoride in public water supplies. Source (16).

	Fluoride ppm	*Height*	*Weight*
Galesburg) Monmouth) Ill.	1.8	67.2	135.6
Aurora, Ill.	1.2	66.7	136.5
Elgin, Ill.	0.5	68.0	136.1
Quincy, Ill.	0.1	67.2	134.2
Waukegan, Ill.	0.0	67.4	135.8
Washington, D. C.	0.0	68.4	140.0

TABLE II

Comparison of bone-fracture experience of 1458 high school boys ages 15 to 17 years, residing in cities with different concentrations of fluoride in public water supplies. Source (16).

	Fluorine (ppm) in water	*Total number of bone fractures per 100 boys*
Galesburg	1.9	27.0
Monmouth	1.7	31.0
Aurora	1.2	25.3
Elgin	0.5	24.3
Quincy	0.1	21.3
Waukegan	0.0	25.0
Washington, D. C.	0.0	32.4

TABLE III

Comparison of cancer mortality rate per 100,000 in areas with different concentrations of fluoride in the public water supplies. Source (19), (17), (18), (20) and (21).

Texas		*Mortality Rate*
Cities having little or no fluoride (1948-49)		91
Nacogdoches Tyler Abilene Stephensville) Total Population 105,334		
Cities having 3 to 4.5 ppm fluoride (1948-49)		81
Lamera Lubbock Plainview Amarillo) Total Population 163,382		
Wisconsin		
Stevens Point little or no fluoride (1945-49) Population 16,550		136
Green Bay, 2.6 ppm fluoride (1945-49) Population 52,443		131
Wisconsin		
Sheboygan, Population 40,638		
Little or no fluoride (1940-44)		148
After fluoridation (1945-49)		138
Colorado—California		
San Francisco little or no fluoride	1938	151
Population 1,131,110	1947	149
Denver 1.2 ppm fluoride	1939	137
Population 316,124	1947	132

TABLE IV

Comparison of survival rates of different types of cancer 12 months after microscopic diagnosis, expressed as per cent survival. Source (17) and (18).

	San Francisco Little or no fluoride	*Denver 1.2 ppm*
Cancer, all types	70%	66%
Cancer of stomach	34	33
Cancer of lungs and bronchii	16	20
Cancer of breast	44	39
Cancer of uterus	83	78
Leukemia	32	38
Lymphomas	58	62

TABLE V

Comparison of deaths related to pregnancy in cities with different concentrations of fluoride in the public water supplies, 1940 through 1944. Source (22).

	Green Bay 2.5 ppm	*Fond du Lac 0.5 ppm*	*Sheboygan 0.03 ppm*
Death Rate (per 1,000 population)	9.10	12.1	10.0
Still Birth Rate (per 1,000 live births)	22.5	20.7	24.0
Neonatal Rate (per 1,000 live births)	25.1	22.7	22.4

TABLE VI

Comparisons of death related to pregnancy in cities with different concentrations of fluoride in the public water supplies, 1945 through 1949. Source (22).

	Green Bay 2.5 ppm	*Stevens Point 0.2 ppm*	*Sheboygan 1.2 ppm*	*Sheboygan .03 ppm (Before fluoridation) (1940-44)*
Death Rate (per 1,000 Population)	9.1	9.0	9.7	10.0
Stillbirth Rate (per 1,000 live births)	17.5	15.0	19.1	24.1
Neonatal Rate (per 1,000 live births)	24.6	32.0	22.7	22.4
Maternal Rate (per 1,000 live births)	.7	2.6	1.1	1.7
Infant Rate (per 1,000 live births)	33.6	46.4	30.8	30.9

Fears are often expressed that even physiologic concentrations of water-born fluorine may have an adverse effect upon suffers from certain organic diseases. In Tables VII and VIII[22] appear the vital statistics from these same Wisconsin communities over the same successive 5 year periods, 1940-44 and 1945-1949. The frequency of the following disorders are reported: health diseases, cancer, cerebral hemorrhage (stroke), nephritis (degenerative diseases of the kidneys), pneumonia, diabetes, tuberculosis, influenza and appendicitis. The utter lack of correlation between the numbers of deaths from any of these diseases and the naturally-occurring fluorine content of the respective municipal water supplies is obvious, including the comparison of pre- and post-fluoridation data in Sheboygan. The Commissioner of Public Health of Sheboygan, G. C. Hildebrand, M.D., advises: "I am enclosing a chart giving the number of deaths of the more common causes of death. There is nothing in our statistics in the last ten years to indicate that fluoridation has had any adverse effects on the health of the people of this community."[23]

TABLE VII

Comporison of death rate of some representative diseases in cities with different concentrations of fluoride in the public water supplies, 1940 through 1944. Source (22).

	Green Bay 2.5 ppm	*Fond du Lac 0.5*	*Sheboygan 0.03*
Leading Causes of Death (Rates per 100,000 Population)			
Heart Disease	307.6	360.9	311.0
Cancer	127.2	195.5	148.1
Cerebral Hemmorrhage	93.9	130.8	97.9
Nephritis	51.0	114.7	41.3
Pneumonia	27.7	28.7	28.5
Diabetes	34.6	38.2	32.5
Tuberculosis	17.7	19.8	32.5
Influenza	17.7	6.6	8.4
Appendicitis	12.5	5.1	4.4

TABLE VIII

Comparison of death rate of some representative diseases in cities with different concentrations of fluoride in the public water supplies, 1945 through 1949. Source (22).

	Green Bay 2.5 ppm	*Stevens Point .02 ppm*	*Sheboygan 1.2 ppm*	*Sheboygan .03 ppm*
				(Before fluoridation 1940-44)
Leading Causes of Death				
Heart	279.7	298.5	340.9	311.0
Cancer	131.6	136.2	137.7	148.1
Cerebral Hemmorrhage	103.3	77.0	124.2	97.9
Nephritis	28.7	32.0	21.7	41.3
Pneumonia	19.0	33.2	23.9	28.5
Diabetes	20.9	34.3	24.4	32.5
Tuberculosis	7.8	14.2	19.4	32.5
Influenza	8.2	2.4	4.5	8.4
Appendicitis	5.2	3.6	2.3	4.4

TABLE IX

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Infant Death Rate (per 1000 live births)	28.2	25.5	30.8	32.4	36.0	31.6	23.6	19.4	20.1	17.9
Death Rates: (per 100,000 population)										
Heart Disease	367	390	477	430	472	395	403	428	377	404
Nephritis	50	57	68	57	77	51	52	47	38	11
Intracranial Lesions	120	118	139	131	149	143	111	104	101	150

The addition of sodium fluoride to the water supply of Grand Rapids, Michigan, was initiated on January 25, 1945. Only a trace (0.1 ppm) of naturally occurring fluorine was previously present in the water obtained from Lake Michigan and the concentration is now supplemented to 1.0 ppm. Table IX has been prepared from vital statistics of 1941-1950 furnished[24] by W. B. Prothro, M.D., Public Health Director of Grand Rapids, and sets forth the infant death rate and the death rates due to heart disease, nephritis and intracranial lesions (including brain tumors, strokes and other disorders arising within the skull.)

In comment, Dr. Prothro writes: "We have not observed any significant change in the vital statistics of Grand Rapids since the inception of our fluoridation program." Dr. C. V. Tossy, Associate Chief of the Public Health Dentistry Section, Michigan Department of Health, remarks: "Vital statistics in Grand Rapids have been studied in comparison with the rest of the state, and there are no differences that could be attributed to fluoridation of the water. There have been no adverse effects of any kind noted."[25]

The City of Janesville, Wisconsin, whose water supply was naturally free of fluorine, started the addition of sodium fluoride in the proportion of 1 ppm on July 26, 1948. Fred B. Welch, M.D., the City Health Commissioner, writes: "An evaluation of our vital statistics show no adverse effects have been noted with regard to chronic diseases of the kidneys, circulatory system or cancer and diabetes mellitus."[26]

Additional information of value has been received in response to inquiry directed to the president of the local medical society[27] and to the community health officer,[28] respectively, of each of fifteen cities of more than 10,000 population which has had a water fluoridation program in effect more than three years (initiated before January 1, 1950). The substance of the questions to the practicing physicians is 1) "Do you notice any change in the course of certain diseases since fluoridation was started?" and 2) "Do any of your local physicians forbid the use of the fluoridated water in treating such patients?" The diseases specified were cancer, diabetes and inflammatory or degenerative diseases of the circulatory system and of the kidneys. The second question was repeated in the query to the district health officers, along with a request for current information on vital statistics and dental results. We failed to receive answers to these two questions from three of the communities. The replies from twelve,[15, 23, 24, 26, 29] four of which have been quoted verbatim, are unequivocally in the negative. There is no dissatisfaction or concern reported among the physicians in the communities in which fluoride supplement up to physiologic concentration has now been added for from three to eight years. No physician in these communities is reported to forbid the use of water from the municipal supply and substitute water from another source. This is not offered as scientific evidence but as proof of the attitude of the physicians who treat the sick of these twelve cities whose total population exceeds 785,000 persons, according to the U. S. Census of 1950.

Returning to consideration of areas in which the natural concentration of fluorine in water equals or exceeds the ideal figure of approximately 1 ppm, it has already been stated that more than three million persons have used such concentrations (up to 5 ppm) all their lives without reported ill effects on health.[12] It is probable that analyses in other areas will make this number larger, as a recent report[30] from Iowa indicates that a considerable percentage of people in that state are using water containing physiologic, or higher, concentrations of fluorine. Evidently, the physiologic daily dose must be exceeded several-fold

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for very prolonged periods before storage of fluorides in bone becomes detectable to X Ray examination. This condition of "bone fluorosis" is the next detectable sign after dental fluorosis (mottling) that ideal intakes are being grossly exceeded. Its existence has not been demonstrated in persons receiving up to five times the amounts from natural sources or by any artificial fluoridation program. An X Ray survey of 31 inhabitants of Bureau, Illinois, residents of that community for from 18 to 68 years, and using a water supply providing 2.5 ppm of fluoride, revealed none of the hardening of the bones that characterizes fluorosis. A study[31] by the same authors of 86 inhabitants of Kempton, Illinois, where the content of fluorine in water varies from 1.5 to 3.0 ppm also failed to show fluorosis of bone. At a much larger intake (8 ppm) a survey[11] already cited, was made by a team consisting of three physicians, three nurses and one dentist in the community of Bartlett, Texas. Complete physical examinations, medical history, urinalysis, blood counts and X Rays of bone were made on everyone resident there for more than 15 years. Over 3000 X Rays were taken and were submitted to the specialists in two well-known clinics for interpretation. From one consultant came the opinion that in 12 per cent of the individuals over fifty years of age a minor degree of change in bone structure was present but was without clinical significance. In the neighboring town of Cameron, with three times the population, the same study was made on one out of three persons. Although the concentration of fluorine in the water in Cameron was only 0.3 ppm almost identically that of St. Louis, no evidence was developed to show that the residents of either community were healthier in any way than those of the other. Mottling of the teeth, of course, was common and caries infrequent in the people of Bartlett, in comparison with those living in Cameron.

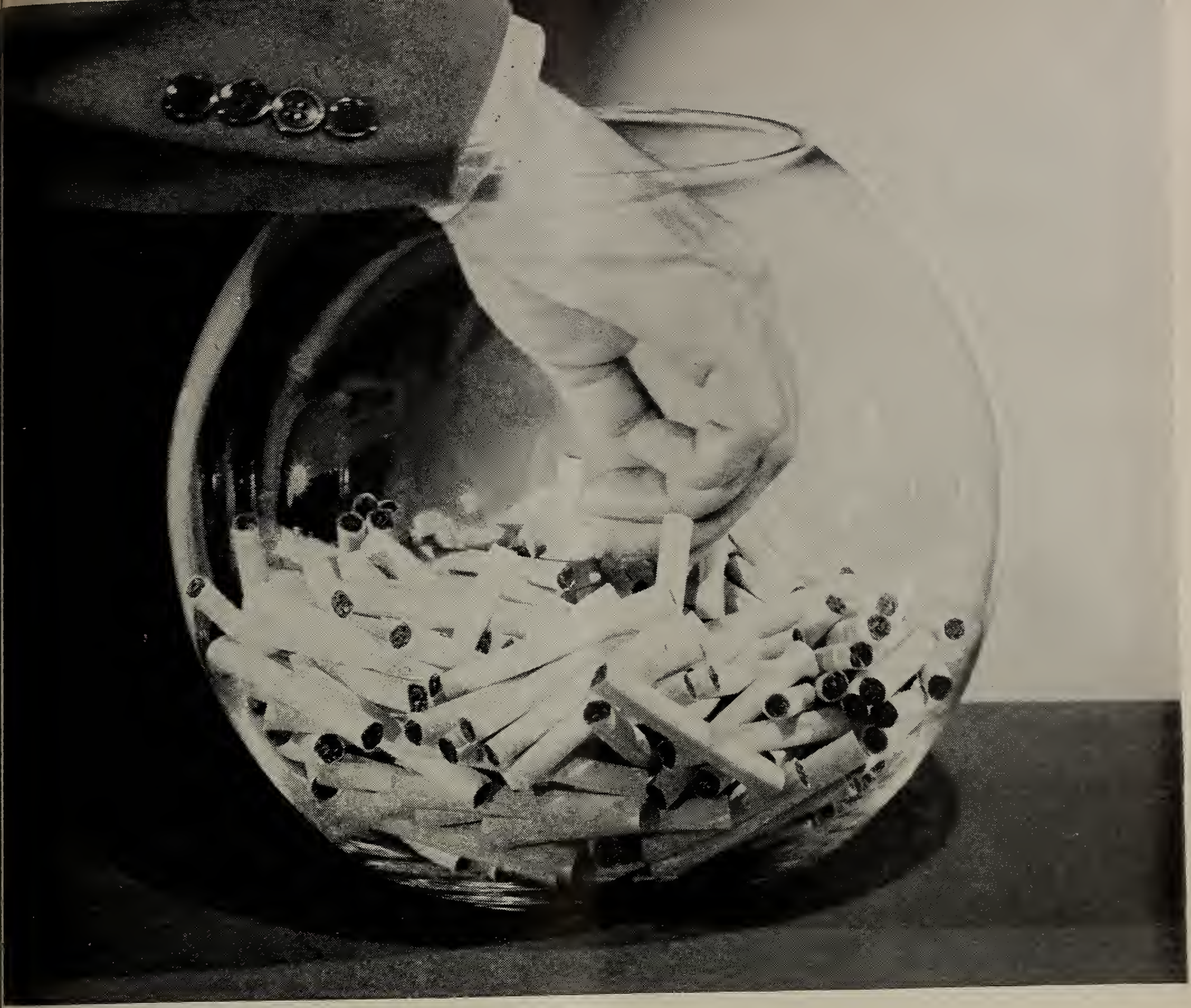
It is outside the range of our purpose to review the chronic toxic effects that appear with still higher intakes of fluoride. These are seen in industrial poisoning and usually involve intakes by breathing dustborn fluoride in enormously higher amounts than those defined as appropriate to a water fluoridation project. It has been shown that with daily intakes up to 5 mg. of fluorine (five times the ideal dose) excretion by urine, sweat and feces keeps up with intake,[2] only a small fraction being taken up by the teeth. The concentration of fluoride in the urine becomes, therefore, a good indication of the intake until toxic doses are reached and urinary output lags behind bone storage of fluorine. Therefore, some idea of the magnitude of the intake of those industrial workers who have shown X-Ray evidence of bone fluorosis, both with and without symptoms, is revealed in their average reported urinary concentration of 16 ppm in one study[32] and of 10 ppm or more in another.[33]

We have, therefore, examined the data submitted by direct medical study of persons using fluorine in physiologic, or larger, concentration in the water supply and the comparative vital statistics revealing incidence of a variety of diseases in communities whose waters bear various concentrations of fluorine, both above and below the ideal level. A third method of determining the effects of fluorine within a restricted range of daily dosage is that involving the experimental feeding to humans and to animals. We have cited twice the study made by McClure[2] and Mitchell (Professor of Animal Nutrition, University of Illinois) and co-workers. They fed to five healthy young men a diet supplemented by fluorine in various forms at different doses up to 6 mg. per day over periods of 21 to 26 weeks. Chemical analyses of all food and fluid and of all excreta (urine, sweat and feces) were made at intervals for fluorine content, hence a most through and critical "balance study" was carried out. Four of their important findings and conclusions will be quoted directly:

1) "The elimination of absorbed fluorine via the urine and perspiration is practically complete when the quantities absorbed do not exceed 4.0 to 5.0 mg. daily." 2) "The proportion of fluorine excreted by the kidneys fell during periods of higher environmental temperature and the proportion excreted in the sweat rose under these circumstances." 3) "There was no significant retention of fluorine in the bodies of these young adult men when total daily fluorine ingested did not exceed 4.0 to 5.0 mg. daily. The data suggest that these may be the limits of fluorine which may be ingested daily without an appreciable hazard of body storage of fluorine." 4) "The consistent evidence of practically complete fluorine equilibrium in these human subjects would seem to indicate also that exposure to domestic waters, such as Galesburg, Illinois, drinking water containing 1.8 to 1.9 ppm fluorine, or any drinking water which contributes an average of not more than 3.0 to 4.0 mg. fluorine to the ingesta (total intake of fluids and solids) is not liable to create a public health hazard of cumulative toxic fluorosis." Four of their five subjects were carefully examined at the end of the study period for signs of possible injury to health. Complete physical examinations, blood counts and smears, urinalysis, dental examination and X-Ray of the teeth were not revealing. There was no inflammation of the skin to indicate irritation from the unusually high amounts of fluorine in the sweat.

The findings of McClure and Mitchell substantiated earlier balance studies by Machle and Largent[3] in 1943, although the latter reported storage at total daily intakes of 6 mg. Failure of Machle and Largent to measure the fluorine content of sweat may account for such discrepancy between intake and output at these comparatively large intakes. The results of these exhaustive balance studies are such as to let us say with confidence that we know enough of the means by which the body disposes of fluorine at levels of daily intake up to 5 mg. to predict that intakes of the order of 1 mg. daily over however long a period will not cause injury to health.

A very large body of research is reported on experimental animals fed fluorine in various chemical combinations in a considerable dosages range. While research on member of one species cannot necessarily be applied to those of another species (including man), certain observations as to margins of safety and variations in absorption of different chemical compounds of fluorine are of interest, particularly in considering certain objections to the fluoridation of water. In experiments on rats, Roholm[35] found that a dose of 1 mg. of fluoride ion per kilo (2.2 pounds) daily would induce incipient mottling of the enamel; the comparable intake for a man weighing 154 pounds would be one quart of water daily with a concentration of 70 ppm. Five times this amount would cause bone fluorosis; ten times the original dose (or the equivalent of one quart of water daily, with a concentration of 700 ppm) regularly causes signs of ill



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"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY health. Largent fed 65 mg. of fluorine (as sodium fluoride) daily to two dogs from the age of eleven months. After five and one half years the animals were sacrificed and no noteworthy changes were found upon miscroscopic examination of the organs or bones; during life no changes in the bones detectable by X-Ray examination developed.[36] In evaluating such a report, one must take into account the fact that a corresponding daily dose for a man would be enormously larger than the 1 mg. amount considered ideal for dental purposes. Similar studies have been carried through several generations of dogs without discernible effects on their health, yet, it must be repeated, sensitiveness of different species to the effects of fluorine differ sufficiently that literal application of data on dosage cannot safely be carried over from one species to another.

Important differences in the absorption from the intestine of fluorine, depending upon the form in which it is ingested, was brought out in the publication[37] by Greenwood in 1946. He fed fluorine in a dosage of 5 mg. per kilo (2.2 pounds) to puppies as sodium fluoride, as bone meal and as defluorinated phosphate. It was noted that dental fluorosis appeared in the puppies receiving sodium fluoride, but not in those receiving the same quantity of fluorine in the other forms, an indication that fluoride ion in bone meal and in defluorinated phosphate is less readily absorbed from the intestine than is sodium fluoride. Jackson came to the same conclusion and reported[38] his feeding experiments on immature and adult rats, showing conclusively that the concentrations of fluorine differs considerably in different bone meals and cooked bone, depending both upon their origin and particle size. Jackson demonstrated the variability of absorption from the intestine of fluorine in bone meals due to these and to other factors and cited other investigations in animal and human feeding experiments to the same point. One of McClure's[2] salient conclusions was that absorption of fluoride supplements is largely dependent upon their solubility (i. e., upon the ease with which they dissolve in water or in digestive juices). As might be expected, in McClure's balance studies, previously described, from 35 per cent to 50 per cent of the fluoride ingested in bone meal was not absorbed from the digestive tract and appeared in the feces.

To conclude this inquiry into the most pertinent experiments that have been performed on animal species, let us return to man and cite one series of observations upon the feeding of sodium fluoride in capsules to patients dying of incurable, malignant (cancerous) states. Black and his co-workers reported[39] upon the results in 70 such individuals, adults and children. Children with leukemia, a deadly disease of the blood forming organs, received a total daily dose of 80 to 200 mg.; the average adult dose was 320 mg. daily. The usual period of medication was three or four months and even in periods up to six months no evidence of acute or chronic intoxication was detected. Microscopic examination of organs after death from the disease also failed to reveal damage to tissue. One patient is reported to have received a total of 5600 mg. intravenously in doses of 400 mg. over a period of nine days without apparent toxicity! Numerous investigators report the personal ingestion of as much as 250 mg. at a single dose although an estimated dose of 105 mg. has been reported to be fatal. These acute, short-term experiments are not pertinent to the consideration of a water fluoridation program with a daily dose of about 1 mg. of fluorine to the individual, young or old, sick or well. They are introduced only to demonstrate that surprisingly large quantities of this chemical element, fluorine, have been taken daily under careful scrutiny, often over considerable periods of time, by man and animals without detectable ill effects.

We have, then, considered the evidence of all types gathered by systematic study of individuals and of vital statistics and by laboratory investigation and we have not encountered any hint of a health hazard in the ingestion of water fluoridated naturally or by supplement to the physiologic level or even to a concentration four times as high. The reasons why no evidence of injury to health has occurred or is to be anticipated have also been examined. They may best be summarized by the statements: 1) The body shows no tendency to store fluorine in physiologic dose, except for a very small fraction in the developing teeth. 2) Excretion through the kidneys and skin of absorbed fluorine in ideal dosage is practically complete. 3) On the basis of all evidence, these physiologic (functional) processes are unchanged at levels of intake of fluorine at least four times the ideal daily doses, thus providing a very wide margin of safety for the consumer of properly fluoridated water, whatever his age or state of health. 4) There is strong evidence to support the view that this factor of safety extends to intakes of eight times the ideal daily dose and there is no published evidence to the contrary.

Freedom to dissent from a popular view and the right to advance one's opinion on any topic are among the most precious heritages of those who live under a representative form of government. Part of the price which we gladly pay for the exercise of these rights is, inevitably, delay in instituting programs which are either highly desirable or vitally necessary. Because of the need for accurate definition of the problem to be faced and the merit of a specific proposal for attacking it, confusion and controversy mark a predictable stage through which the most meritorious proposal must pass. These result from impatience or inadequate explanation by its proponents and from honest doubt, unreasoning anxiety, lack of understanding, suspicion of motives, sheer ineptness, or self-seeking in various degrees on the part of opponents. These evidences of human imperfection form a pattern familiar to one who has studied the progress of legislative proposals to supplement too low a natural concentration of fluorine in a community water supply. Every elected official of a municipality in which fluoridation is contemplated is duty bound to consider the views of the objectors as well as those of the advocates. It is important that he be fully informed as to the nature and merit of the opposition. Those of us with scientific aptitude and training who, as members of the medical profession, enjoy the public trust are under the dual obligations of studying the issues which have been made to appear controversial and to proclaim which arguments and attitudes have scientific merit, classifying as irrelevent those which lack such quality.

In the enormous literature on fluorides and on fluoridation of water, scientific publications or public testimony in opposition have appeared from six individuals in particular whose scientific training and experience qualify them as deserving of respectful attention and inquiry into the reasons for their views.

They all appeared before the Delaney Committee in opposition to fluoridation of water. Since their opposition is repeatedly cited by those who have little claim to aptitude or opportunity for objective evaluation of the problem, detailed comment is in order.

1) Dr. Robert S. Harris, Professor of Biochemistry of Nutrition, Massachusetts Institute of Technology, brought his views into public attention in 1951 in a letter[40] to a newspaper and made statements therein about the behavior of fluoride in the body which, when he defines the concentration, are at variance with the overwhelming weight of evidence or which leave the concentrations undefined and therefore simply useless as a basis for discussion. The 12 points into which his letter is arranged constitute an odd mixture of statements of widely supported fact, of allegations which cannot be documented, of others which have been disproven and of judgments with which the informed reader may differ. Certain of his arguments were later elaborated in the form of 19 questions in testimony before the Delaney Committee (of which, more later). They have been thoughtfully answered[41] by Gerald J. Cox, Ph.D., Director of Dental Research, School of Dentistry, University of Pittsburgh, a distinguished contributor to our factual knowledge of the effects of fluorine in human metabolism. Dr. Harris' questions reveal principally his wholly understandable wish that more were known of the ultimate cause (if there be only one) of dental caries. They raise no points, however, whose answers can be construed as being unfavorable to a fluoridation program. This consideration has, obviously, impressed itself upon Dr. Harris who has subsequently (1953) written a letter[42] stating that he neither supports nor opposes fluoridation. This marks a decided shift from his position taken in 1951 and expressed in 1952 before the Delaney Committee.

2) V. O. Hurme, D.D.S., is Research Director, Forsyth Dental Infirmary, Boston, Mass., in which institution dental service is provided for children. He is the author of a paper[43] entitled "An Examination of the Scientific Basis for Fluoridating Populations" and of a number of public statements questining the advisability of fluoridation of water supplies. His article produces no evidence that fluoridation is either dangerous or ineffective. A study of his paper leaves the reader with the convictions a) that the author has failed to review the voluminous literature which gives concrete evidence upon points about which he confesses himself to be in doubt and b) that his use of such terms as "mass medication" and "compulsory" procedures reveal an emotional bias which casts doubt on his objectivity. A lengthy comment on points which Dr. Hurme has characterized as controversial has been made subsequently in the same publication by David B. Ast, D.D.S., Director of the Bureau of Dental Health, New York State Department of Health who has been, unlike Dr. Hurme, long noted for his contributions to the scientific literature on this subject. Those who find themselves alarmed by Dr. Hurme's wish to delay fluoridation pending the establishment of criteria which he does not, himself, define should read Dr. Ast's rebuttal. To quote the latter verbatim, "Many of the accepted public health procedures were generally applied with far less study and knowledge of the mechanism by which they worked or side reactions than is known about water fluoridation. I know of no public health procedure, including water chlorination, Pasteurization of milk, or vaccination which has had the intensive and comprehensve study before it was applied as water fluoridation has had."

3) The antifluoridation pamphleteers have made a major issue of a premature announcement of research by Alfred A. Taylor, Ph.D., at the Biochemical Institute, the University of Texas (Austin). Dr. Taylor set out to study the time of appearance of malignant breast tumors in a strain of mice used by many laboratory workers because they are bred to be specific trait of developing such tumors spontaneously in nearly 100 per cent of animals. Dr. Taylor proposed to give different concentrations of sodium fluoride in the drinking water of different groups of the mice and to observe whether or not the age at which tumors appeared would show any correlation with their respective intakes of fluorine. As is their hereditary trait, practically all of the mice died with well developed tumors of the breast. Dr. Taylor, unfortunately, sent a letter to Mrs. Marion E. Lyon (of whom more anon) before he had carefully reviewed all the pertinent data in his experiment and even before publication of his findings in a scientific journal. She, as did other pamphleteers, quoted him at length and reproduced his tabulated data to show that mice thought to be receiving 1 ppm and 10 ppm of fluoride in drinking water developed the breast tumors at an earlier age than those receiving distilled water. This created a furor, as may be imagined, and was used effectively to cause such alarm in lay minds that plans for fluoridation in several communities were delayed for the time being. A furor on a different plane, however, resulted when a research team from the U. S. Public Health Service reviewed Dr. Taylor's plan of procedure and found[44] that the solid food of the experimental animals consisted of a chow which, itself, contained 42 ppm of fluorine! As aftermaths, Dr. Edward Taylor, Director of Dental Health of the Texas State Department of Health wrote an article[44] entitled "Facts Relative to Rumors that Fluoridation Causes Cancer," which was published promptly in the Texas Dental Journal in refutation of the rumors. Moreover, Dr. Chauncey Leake, Vice-President of the University of Texas and one of the most respected men in the field of the medical sciences, wrote a letter[45] to Dr. Edward Taylor expressing his regret over the incident and making it plain that "there is no contraindication of fluoridation of drinking waters." These, then, are the facts about the research and its attendant publicity which have given rise to the allegations that water fluoridation programs increase the risk of the development of cancer or that the effects of drinking fluoridated waters may be particularly hazarodus for persons who have cancer!

4) Dr. A. L. Miller is a former State Health Officer of Nebraska, from which State he is now a U. S. Representative and a member of the Delaney Committee, as such, he made a separate statement and has made other addresses on fluoridation before Congress, taking a position in opposition to programs for the fluoridation of community water supplies. His arguments disregard the weight of evidence and do not show regard for the realities of the situation in his recommendation that fluorine be provided by means of tablets or supplement in milk, as will be shown later. He has tortured the meaning of words in attempting to "interpret" the forthright approval by the American Medical Association of the fluoridation of water supplies. He has fallen into serious

factual error in using inappropriate vital statistics in evaluating the incidence of circulatory diseases as a cause of death in Grand Rapids, on which point he has been most clearly and courteously set straight[46] by W. B. Prothro, M.D., Public Health Director of Grand Rapids. He has presented no acceptable evidence that fluoridation is either dangerous, ineffective, or undesirable and his testimony has been challenged in detail elsewhere.[47] His statements have, inevitably, been widely reproduced as a scientific opinion in opposition to fluoridation. If he claims to speak with scientific, rather than political authority, however, his attitude leaves much to be desired.

5) Margaret C. Smith, Ph.D. and 6) her husband, Howard V. Smith, are distinguished chemists who have for many years been associated with the University of Arizona, the former in human nutrition and the latter in agricultural research, respectively. They were among the first to show by animal experiment that mottled teeth could be produced by an excess of fluorine in the drinking water; among their many valuable contributions are observations on the increased incidence of fluorosis at higher environmental temperatures with a given intake of fluoride. In their testimony before the Delaney Committee (loc. cit., p 1602-1614, 1614-1623) they stress the value of fluorine in reducing the incidence of dental caries and state their acceptance of the work of the U. S. Public Health Service in epidemiological studies of naturally fluoridated water and in experimental studies of water supplemented by fluoridation (such as in Grand Rapids). They expressed opposition to the extension of fluoridation programs to other cities (as of 1952) principally in their shared belief that sufficiently exact climatic data were not then available to set a concentration for a given community which would be high enough to give maximum caries prevention, yet low enough to prevent obvious dental fluorosis. A careful reading of their testimony makes it clear that they consider even "questionable" or "very mild" degrees of dental fluorosis, as defined by the U. S. Public Health Service, to be not only toxic manifestations of fluorine intake but as esthetically objectionable. Now, the definition of "very mild" dental fluorosis postulates only a few very small, whitish, nonopaque areas on the back teeth, but not involving as much as 25 per cent of any tooth surface. Such are not detectable on examination by the average physician or dentist, much less by the individual who has them. It is therefore, the accepted opinion that they are not objectionable and that their presence in as many as 10 to 15 per cent of persons is not too high a price to pay for the partial protection against caries obtained by fluoridation. It is doubtful that the Smiths are on sound ground in differing with the dentists on this point and insisting on classifying such findings as dental fluorosis, as defiguring and as evidence of fluorine toxicity. Evidence has been published both before[9, 10] and since[61] their testimony to substantiate their view that the generalization is unsound that 1 ppm of fluoride is the ideal concentration for every community in the United States, regardless of climate, as will be elaborated. There can be no quarrel on this point between the Smiths and many advocates of fluoridation programs.

Such is the extent of the published dissent from the almost unanimous view of those qualified through training and experience to express themselves on the scientific aspects of the situation. That the recorded anxiety as to possible, usually unspecified ill effects on the part of so small a minority has been rejected as contrary to the evidence or irrelevant is obvious in the approval of fluoridation by the respected, responsible medical and dental organizations yet to be listed. There is an equally impressive roster of advocates among men of science engaged in teaching, in research, in public health activities and in water engineering. The testimony of the opponents quoted above would be a slender reed to flourish in aggressive opposition. It would be fatuous to assume that such constitutes the backbone of determined efforts to prevent the wider adoption of fluoridation. It is a simple matter to identify the sources of strength behind the avowed and open resistance to fluoridation but assay of their various motives is sometimes difficult. Several groups of pamphleteers regularly spread their antifluoridation documents in communities which are entertaining proposals for fluoridation. Pertinent data as to membership, methods of arriving at policy, organization and sources of funds are not often revealed. Close study of their printed material gives a clear view, however, of their standards of reporting and what, for want of a better term, may be termed their sense of responsibility. Space does not permit the inclusion of the detailed critique which has been prepared. A few allusions, quotations and comments should be sufficient to characterize them. Printed and mimeographed material from the following three sources have been liberally circulated in metropolitan St. Louis and have been effective, hitherto, in their purpose.

1) A compilation of mimeographed material was received on November 10, 1951, from the Water Commissioner of St. Louis, Mr. Thomas J. Skinker, at the St. Louis Medical Society. It bears the name and address of Mrs. Marion E. Lyon, 415 South Main Street, Geneva, N. Y. and the notation that it was obtained from her on October 25, 1951. It consists of 14 sheets of paper with 46 numbered items of excerpts from newspaper stories, scientific publications, speeches and letters addressed, presumably, to Mrs. Lyon. The authors are so various in occupation as to defy classification and their attributed claims to authority are, at times, obscure. Reference will be made to the paragraphs as numbered, for the convenience of those in possession of copies of this document. The comments to be made are concerned with views attributed to those individuals whose stated professional position immediately rouses the interest of the reader. As might be expected, the opinions of Alfred Taylor, Ph.D., the unhappy outcome of whose observations on breast cancer in mice will be recalled, are set forth in paragraphs 1, 16 and 37, paragraph 16 being devoted to his letter, itself to Mrs. Lyon. The views of Dr. V. O. Hurme,[43] appear in paragraphs 24 and 35 and Dr. Robert S. Harris' letter[40] of February 25, 1951, is quoted, in part, in paragraph 33. The portion of Dr. Harris' letter testifying to the effectiveness of fluoridation is not reproduced.

To the uninitiated, the appearance of testimony by Dr. Huntington Williams, M.D., Health Commissioner of Baltimore, in paragraph 11, by Winston H. Tucker, M.D., Health Commissioner of Evanston, Illinois, in paragraph 26 and by Dr. J. L. T. Appleton, Professor of Microbiology in the School of Dentistry, University of Pennsylvania, in paragraph 34, that fluoridation should be undertaken only as an experiment comes as a shock until one notes that these statements are undated. Inquiry shows that Dr. Williams subsequently recommended[43] on March 3, 1952, fluoridation of the water supply of Baltimore and this was put into effect on November 26, 1952. Dr. Tucker's statement was made in October of 1951; his advocacy of fluoridation for other communities has been made clear.[16] Dr. Appleton's quoted statement was made in May, 1950; he is a declared advocate of fluoridation and, as a member of the Ad Hoc Committtee on Fluoridation of Water Supplies, National Research Council, participated in the preparation of that Report[7] which recommended fluoridation in November, 1951. These gentlemen are distinguished students of the effects of fluoridation, of conservative and mature judgment and in positions of grave responsibility. They had no hesitancy about counselling a cautious approach in earlier years. Statements in opposition to fluoridation are attributed in paragraph 26 to Dr. E. V. McCollum, Professor Emeritus of Biochemistry of Johns Hopkins University, one of the great scientists of his generation, whose textbook is known to every medical student of the past fifty years. Mrs. Lyon has released material quoting one Harold Lamb, D.M.D., who quotes an alleged letter dated August 21, 1950, attributed to Dr. McCollum, in these words. "This measure of prevention, in some measure, the high incidence of dental caries, is in the experimental stage. So far as I am aware, it has not been found to be effective where it has been tried." Dr. Lamb thereupon assures the reader that this statement "may be verified at sources by any who wish to take the trouble to write." Upon inquiry, Dr. McCollum has denied[49] being the author of such a letter and has challenged the Citizens Medical Reference Bureau to verify its existence which they have not, apparently, undertaken to do. An issue far more grave than mere obsolescence of viewpoint has been introduced by the inclusion of material whose authenticity has been repudiated. No explanation from Mrs. Lyon, Dr. Lamb or the Citizens' Reference Bureau has come to our attention.

In portions of the Lyon document which purport to abstract original source material from the scientific journals, no pretence of reporting objectively the whole purpose and conclusion of each author is evident to one who has studied the original publications. In paragraph 22 appears an excerpt attributed to the April, 1951, issue of Prevention, a Magazine Devoted to the Conservation of Human Health (of which, more later). This excerpt is written in such a way as to give the reader the impression that all the material in it expresses the findings and viewpoints of the studies[2, 3, 37, 38] on fluoride "balance" and the differences in solubility and absorbability between bone meal and sodium fluoride, reviewed earlier in considerable detail. Whoever prepared the material for publication in Prevention, however, has very carefully selected certain data of the authors and written it up in such a way to include his own comments as though they were the remarks of the authors. He has omitted all data, references and conclusions unfavorable to his cause. Jackson[38] and Largent[3, 34] would be amazed to learn that an uninformed person, reading paragraph 22, would prabably draw the conclusions that they considered bone meal to be a "safer" or more appropriate method of administering fluorine than by the fluoridation of the water supply for human beings. And McClure[2, 16] one of the most prolific contributors of studies on the metabolism of fluorine, would never discover, in reading the mixture of his data taken out of context and special pleading by the reviewer, that he, himself, was a consistent advocate of fluoridation.

The evidence advanced above should be sufficient to thoroughly discredit the printed matter emanating through the Lyon document, from the Citizen's Reference Committee and in Prevention. A further comment on the last is in order. Perusal of several reprints have shown a continuing devotion to the exploded[46] views of Representative Miller and of Dr. Alfred Taylor more than a year after Dr. Leake's repudiation of that affair.[45] In response to request, the assistant editor of Prevention sent a copy of the issue of June, 1953, with a cordial letter stating: "As you will see, we do not advocate the health policies of any special group. We do research in medical and scientific magazines and publish the results of our findings as they relate to prevention of disease. It is our opinion that a correct diet and way of life will in general prevent many of the diseases of twentieth century life." A study of the issue submitted reveals that such a disclaimer is less than candid. The character of the advertising and of the news articles leads only to the conclusion that this magazine follows the line of thought known as Naturopathy. It includes an antifluoridation article by the same lay author whose diatribe against fluoridation was published in February, 1953, issue of Harpers Magazine and consists of the usual mixture of allegations which form such a familiar pattern. While they concentrate on the "Operation Rat Poison" theme to characterize the fluoridation movement, they seem most concerned[50] about the use of the community water supply as a vehicle for fluorides and they occasionally suggest that fluoride intake for reduction of dental caries may be desirable if it is ingested in some other vehicle. One wonders whether this press has sent pamphlets into those communities which have installed defluoridation plants in order to reduce the high concentration elsewhere as they oppose supplementing the low concentration in St. Louis and St. Louis County. If not, their devotion to "natural" water is tainted, if the former adjective can be fairly applied to any aqueous solution treated as is our own to make it acceptable from the esthetic viewpoint as well as from considerations of self-preservation. Clearly, the human ingestion of adequate amounts of fluoride as bone meal or pablum is acceptable to this publication, as stated in the excerpt attributed to it in paragraph 22 of the Lyon document. Without any imputation as to the motivation of this publication, its position is quite inconsistent, it has no discernible scientific status and its standard of reporting makes any of its statements on this subject unacceptable as evidence.

The product of a third pamphleteer, W. D. Herrstom, of Faribault, Minn., is worthy of note. It is entitled "Americanism Bulletin," selling for ten cents per issue. The September, 1951, issue[51] was sent into St. Louis as recently as July, 1953. It contains "25 reasons why community water supplies should not be fluoridated." These contain no evidence of either scientific or educational value, but express concern lest a saboteur fatally poison an entire community through excessive fluoridation by the mere twist of a valve. Fluoridation is described also as a subtle enemy plot to weaken the mental powers of the American people in order that they will fall an easy prey to "Satanic dictatorship." Another issue appeals strongly to fear of foreign domination and describes the entire fluoridation movement as a plot by socialistic stooges of Mr. Oscar Ewing. The implication is plain that any supporter of fluoridation is necessarily an admirer of Mr. Ewing's politico-economic views! This is entertaining grounds for polemics but is far afield from a discussion of the merits of fluoridation or of possible hazards to health.

The opponents of fluoridation whose efforts are chiefly confined to pamphleteering at ten cents a copy tend to quote one another and operate in effect, as a team. All have laid much stress on the failure of the Delaney Committee to approve the principle of fluoridation of community water supplies. It is fair to state that many open-minded, genuinely inquiring persons without the ability to evaluate scientific evidence have been much impressed by the Delaney Report[52] and such is the natural reaction to what purported to be a congressional hearing of scientific testimony. The Report itself is, we believe, very fair in intention It reflects a clearly-expressed sense of responsibility on the part of the members of the Committee not to reach a hasty conclusion nor one which might conceivably result in harm to the population of any community in the United States.

The Report itself, however, is much fairer in tone than was the atmosphere of the Hearings, as a close reading of the latter makes obvious. A contentious attitude, particularly toward witnesses from the United States Public Health Service, seems to have been displayed by the Chief Counsel and by one of the members of the Committee and moved Representatives Paul C. Jones of Missouri and Walt Horan of Washington, themselves members, to protest against a "prosecuting" attitude toward certain advocates of fluoridation.

We shall not go into a detailed commentary here, as that has been done previously[53] with, we believe, full effectiveness. We would characterize the Report, not as bad, but as disappointing in that it 1) failed to give due emphasis to the better evidence in the Hearings and 2) sought for perfect and complete knowledge in a scientific field unlike that demanded of any other in which reliable data for day-to-day application are available. To deny the validity of the evidence for the safety of fluoridation today pending the completion and extension of experimental investigations is to disregard what has already been learned and to introduce the concept of a conflict between practice and investigation which is not valid. The additional views, filed as a separate report by Rep. Miller have been commented on previously. He is in factual error in the notion that only persons under 8 years of age will be benefited by fluoridation and he is guilty more than once of "interpreting" statements of the American Medical Association to derive meanings which are contrary to the accepted usage of the English language. In response to a recent inquiry, George F. Lull, M.D., Secretary of the American Medical Association, has furnished[54] a complete copy of his statement to the Delaney Committee.[55] The Council on Pharmacy and Chemistry and the Council on Foods and Nutrition unequivocally state: "After considering the evidence available at this time, the Councils believe that the use of drinking water containing up to one part per million is safe." The reasons given for avoiding additional intake of substances of high fluorine content and the wisdom of varying the seasonal concentration of fluoride ion in the water, according to the climatic conditions, will be familiar to the reader. The Councils quite properly limited their statement to consideration of the health hazard. That they refrained from urging communities to support or oppose fluoridation is simply recognition of the fact that the evaluation of the need for fluoridation in a given community and the assurance of the benefit to be expected from such a local program can best be made by members of the dental profession. Any group of physicians would be presumptuous in setting themselves up as better judges of the latter points than the dentists of the community and of the various Health Services. The House of Delegates has followed a similar viewpoint but endorsed the principle of fluoridation as a forceful statement of their belief in its safety and effectiveness.

Many opponents of the fluoridation of water supplies have recognized the merit of a daily intake of fluorine in approximately 1 mg. dosage to increase the resistance of the teeth to caries, provided that another means of ingestion be provided. Such alternatives suffer from either the risk inherent in dispensing necessarily concentrated stock solutions or the uncertainty of dosage through bread, milk, salt or other foodstuffs whose intake by the individual varies much more widely than does the total intake of water (including the water in solid food). The expense and the distribution problems involved in the dispensing of tablets make them an impracticable choice also as a vehicle of preventive medicine. An elaboration[56] of the relative unsuitability of all these methods has been furnished by Robert E. Shank, M.D., Professor of Preventive Medicine and Public Health, Washington University School of Medicine, St. Louis, Missouri. Topical application of relatively concentrated solutions of fluorides (directly to the teeth) have proven to be of definite value as a measure of individual prophylaxis against tooth decay. It is widely held to be less effective than systemic intake of fluoridated water from birth. The limited dental personnel available in both public health work and in private practice and the expense of such a method make it a poor choice of methods of prophylaxis in comparison with fluoridation of a community water supply. It is wholly impracticable as a public health measure, therefore, in any but the small communities or in rural areas. One of the major, secondary benefits to be derived eventually from a fluoridation program is the partial release of dental personnel from the treatment of caries and its complications in order that they may devote more time to oral (mouth) prophylaxis and other phases of dentistry.

It is outside the scope of this report to present the evidence for the effectiveness of fluoridation in those communities in which the concentration of fluorine ion in the water supply was formerly less than ideal. This is the prerogative of those members of the dental and public health professions who have made a lengthy study of the accumulated data. Suffice it to say that we have reviewed many published studies and have been furnished current, as yet unpublished statistics from certain communities which give impressive testimony as to its merit. The close correlaton between endemic (natural) fluoride ion concentration of a community water supply in inverse relationship to the incidence of dental caries at a given age level is a marvel of statistical acceptability. The clarification of this relationship by Dean[57] and others followed from earlier demonstrations[58] that disfiguring brownish mottling of the enamel was due invariably to a high fluorine content of water and that where mottling (dental fluorosis) was common, caries was relatively uncommon. These fundamental observations are a brilliant chapter in American science. Naturally enough, the first practical applications to which they were put were the development of means for removal of excessive fluorine from the water. Such programs of defluoridation were in operation for years before sufficient data had been gathered to permit the safe beginning of programs to supplement waters naturally deficient in fluorine. It is of particular significance that the people of the city of Muskegon, Michigan (which had only a trace of fluorine in its water and was "teamed" with Grand Rapids for continuing comparison upon the initiation of fluoridation in the latter city in 1945) have become so impressed with the reduction of dental caries in the children of Grand Rapids that they have ceased to provide a base-line for comparison by initiating the fluoridation of the Muskegon water.[25] The greatest benefits are seen in those persons who have received an adequate daily amount of fluorine from birth and this benefit has been clearly demonstrated to extend in such persons into adult life, as shown by comparative dental studies[59] of adults up to the age of 44 living in Colorado Springs (2.5 ppm) and those living in Boulder, Colorado which has practically no fluorine in its natural water supply. All of the residents raised in a community with an adequate concentration of fluorine will be benefited thereby in time, not merely the school children. It is not widely enough appreciated, however, that the benefit in reduction of caries from initiation of a fluoridation program in a given community will be proportionate to the concentration of fluoride ion at the outlets of the water system *prior* to the start of the operation. The city with a natural concentration of 0.5 ppm, for example can expect decidely less reduction of caries experience than one with only a trace of fluorine for the people of the former will have the lower incidence of caries prior to fluoridation. The need for increasing the concentration of fluoride in the water supplies of metropolitan St. Louis has been strongly stated, the entire issue of the Bulletin of the St. Louis Dental Society, April, 1953, having been devoted to papers and communications on the subject of fluoridation. Collected data reported elsewhere[60] show that the children of this community have an experience of caries somewhat below the level anticipated from the average fluoride ion concentration of approximately 0.3 ppm and more nearly that to be expected from a water supply containing 0.5 ppm. This is not necessarily of importance; it may be interpreted as being due either to conservative evaluation of observed caries or to the existence of climatic conditions (higher temperature and humidity) in the Mississippi Valley of a more tropical nature then we generally assume. Too many other nutritional and oral factors enter into caries incidence to permit a specific explanation of this point. It must be taken into account, however, in considering to what concentration fluoride, supplement should be added to the municipal water supply and in attempting a prediction of what reduction of caries incidence is to be anticipated thereby.

As has been stressed, the ideal concentration of fluorine to be approximated for any community must be arrived at by consideration of its climatic characteristics and a lower concentration supplied in seasons of considerable warmth and humidity; there is new evidence[61] that dental fluorosis occurs at lower concentrations of fluorine where such weather is prolonged than in more temperate areas. With such a reservation as to actual concentration to be attained, we strongly endorse the Statement on March 1, 1951, by the Health Commissioner of St. Louis, J. Earl Smith, M.D., stating the official position of the St. Louis Health Division and recommending the fluoridation of the St. Louis water supply. Dr. Smith has done well to point out that "Fluoridation does not eliminate tooth decay entirely . . . Fluoridation is not a cure-all; good dental care will continue to be a necessity. Fluoridation is a preventive measure but is not 100 per cent effective. It is no more a substitute for good dental care than pasteurization is a substitute for the clean production of milk. It is, however, a long stride forward in the fight on man's most common defect, tooth decay."

As citizens, as well as physicians, we should be mindful that no evidence of harm to any industrial process from the use of water containing as little as 1 ppm of fluoride has been published. On the contrary, there is much testimony, *based upon investigation in their own laboratories,* that the products of bakers,[62] canners[63] and brewers[64] will suffer no deleterious effect. The fears recently expressed[65] by G. S. Bratton, Technical Adviser to the President, Anheuser Busch, Inc. of St. Louis, fall into two categories, 1) that the making of beer itself may suffer through effects on the yeast (contrary to the evidence cited) and 2) that the increased concentration of fluoride through such processes as produce by-products (which are used in other foods) will exceed permissible limits (approximately 5 ppm), Bratton has been answered, step by step, by W. Victor Weir, President, The St. Louis County Water Co., in an address[66] which should be studied by anyone interested in this phase of the effects of fluoridation. Reprints are obtainable from his office. None of the national distributors of beer has openly opposed fluoridation of their community water supplies but it so happens that none of them is located in a community which has, as yet, initiated fluoridation of its water except Milwaukee which initiated fluoridation July 1953. We have every confidence that members of the brewing industry will not in the future offer either open or overt opposition to a program of preventive medicine that is so demonstrably in the public interest. The reader must realize that the breweries of Milwaukee used water from deep wells containing an average of 0.9 ppm (one as high as 1.8 ppm) of fluoride ion from the year 1879. In more recent years, many breweries established private filtration plants for the use of Lake Michigan water, but now use the municipal water supply which contains only a trace of fluorine. As for other points of interest, fluorides at the specified concentration have no bactericidal (germ-killing) effect, do not affect the compounds formed in water after chlorination and provide all or part of the fluorine needed to remove silica from boiler water, depending upon which compound is used. There have been no effects on sewage treatment processes, the fluoride concentration of sewage quickly reaching that of the water supply.[67]

As of August 1, 1953, the following major cities in the United States are fluoridating their water supplies: Baltimore, Md., Washington, D. C., Pittsburgh, Pa., Cincinnati, O., San Francisco and San Diego, Calif., Tulsa, Okla., Louisville, Ky., Indianapolis, Ind., and Milwaukee, Wisc. Philadelphia, Pa. has authorized fluoridation. Together with the more than 700 other communities in 43 states, a total population of more than 14,000,000, are using water supplemented with fluorine. Missouri is one of the five states in which no fluoriation is being practiced, the others being Arizona, Nevada, New Mexico and Utah.

Exhibit 1.

Stability of an Element

The fundamental premise upon which the science of chemistry is based is that of the uniformity of identity of any element. For instance, all sodium ions with an atomic weight of 23 are identical in properties, no matter what their source. The atomic weight determines the structure of the atom and informs the chemist of the element's characteristic properties and reactions. Ephraim states, The atomic nucleus . . . (is) an extremely stable system.[1]

Along with all other chemists, Professors S. S. Cooper and C. N. Jordan of the St. Louis University Department of Chemistry stated recently that Fluoride ion from one source is identical with Fluoride ion from all other sources.[2]

E. A. Doisy, Jr., M.D.

1. Ephraim, F. Inorganic Chemistry. Nordeman Publishing Co., Inc., New York, Ed. 4, 1943, p. 9.
2. Personal Communication.

Editorial Note: Due to lack of space, only Exhibit 1 is reproduced. Exhibits 2 to 21 are on file at the St. Louis Medical Society and are available for inspection.

The Committee was appointed by Dr. A. N. Arneson, M.D., President, on January 30, 1953.

Members of the Committee:

Harold A. Bulger, M.D., Assistant Professor of Clinical Medicine, Washington University School of Medicine.

Raymond O. Muether, M.D., Associate Professor of Internal Medicine, St. Louis University School of Medicine, and Director of Laboratories, St. Mary's Group of Hospitals.

Willard Bartlett, M.D., Chairman, Assistant Professor of Clinical Surgery, St. Louis University School of Medicine.

Consultants of the Committee:

Edward A. Doisy, Jr., M.D., Assistant Professor of Internal Medicine, St. Louis University School of Medicine.

Robert E. Shank, M.D., Professor of Preventive Medicine and Head of Preventive Medicine and Public Health; Professor of Preventive Medicine in Department of Medicine, Washington University School of Medicine.

J. Earl Smith, M.D., Senior Instructor in Internal Medicine, St. Louis University School of Medicine, and Health Commissioner, The City of St. Louis.

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LONG BEFORE HOT FLUSHES APPEAR . . .

Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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Every man owes a part of his time and his money to the profession in which he is engaged.—Theodore Roosevelt.

Among Ourselves

(Editorially Speaking)

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Too Many Meetings?

At the recent A.M.A. Interim Session, we asked one of the old-timers, who has attended more large and small medical meetings than the average physician, why the zip and zest seem to be gone from most of the meetings of today.

His answer was simple, direct and, probably, correct. "Anyone who keeps up in his reading has already read what the speakers will say in their speeches, and there are just too darned many meetings going on, anyhow!"

We have touched on this subject before, because, unlike Mark Twain's famous comment on weather, this is a topic we can do something about!

For instance, a noted man of medicine visits your locality. His topic is of unusual importance to you if you are a pathologist, an internist, a general practitioner or a surgeon (with any interest in peripheral vascular surgery). And yet, his speech is presented under the aegis of one small group, sandwiched between two or three other lectures in the same community, perhaps at the same hour, in competition with these other speeches.

Why, in Heaven's name, can't these various organizations get together, join forces, instead of dissipating them, put on a few superlative programs with a large attendance, instead of presenting too many inferior programs before too few in the audience?

Our hypothetical case is derived from realities. This authority traveled half the way across the North American Continent to present his subject. His topic was broad enough to be of interest to every practitioner of medicine, whether he looks at blood vessels in the eyeball, or treats gangrene of the big toe!

There's no earthly reason why he could not be presented before one big over-flow meeting which would be held through the cooperation of the county medical society, the pathologists, the internists, the general practitioners, the surgeons and all the other groups. This would save thousands of physicians' man-hours, and would accomplish at the same time the scientific and educational objectives, the primary consideration for holding medical meetings.

Some medical communities have given this matter serious study and have come up with the obvious answer: The consolidation into fewer, bigger, better meetings of these multitudinous, smaller, inferior affairs. This answer is so simple and effective that, where it has been tried, it uniformly has elicited an enthusiastic response.

More medical communities should adopt some such program to quiet the ever increasing and legitimate complaint—too many meetings!

Vincent T. Williams, M.D.

Another Communist Invasion

Like the dreaded malignancies, communism invades by infiltration. It is persistent and tenacious, defying all the laws of normalcy and decency. It creates suspicion, confusion and disorder and thrives best in a country which has first been softened by a socialistic regime, for socialism is but the first degree in communism. Its metastatic cells spread throughout the blood stream of a nation gaining a foothold here and a foothold there, weakening and preparing it for the vast hordes who move in for the kill.

While we as a nation are debating the afforded opportunities given communism here at home during the last twenty years with their resultant harmful effects, a new creeping communist invasion is silently furthering its deadly work. Red dope from China is flooding our country.

The communists are forcing the farmers of Red

China to grow larger amounts of opium by imposing excessive taxation, leaving the farmers no other choice. Opium and heroin are entering our west coast areas in huge quantities. The Federal Narcotics Bureau, headed by Harry J. Anslinger, is unable to crush the traffic. As fast as one "poppy gang" is disposed of another pops up to carry on its leaching, fiendish work.

Every physician has had experience with the cunning of a dope. We have seen his feigned attack. We know of his willingness to enter the hospital for an examination—in a few days, and that for a few days only he wants "something" to tide him over. The dope addict knows exactly what he wants and in its exact dosage. We know the daily cost of illicit dope to an addict is tremendous and that to obtain the purchase price he must resort to thievery and crime. We also know that he will even place his own children on dope in order to broaden his circle of contact in the illicit traffic.

We know the end product of dope addiction to be a cunning, thieving, immoral, irresponsible, weak citizen; an ideal bait for communism.

There is only one solution to the increased flow of Red dope from China. An immediate impressive increase in penalty imposed by our Federal Courts on those who traffic in illicit dope would wipe it out completely and thus repel another communist invasion.

Martyn Schattyn, M.D.

Trends

We are standing in our own light. We continue to turn out at a brisk rate "Board Registrants." These men are fine. They represent a tremendous amount of training and study and they further represent successive gradation by competitive selection.

The trouble is that so frequently our young men are starting out with too specialized a training. It is difficult to find a place for them as regards their specializations and the more specialized they are the more difficult is it for them to start a practice of their own. Also, the more the investment in years of training—the greater is the desire to practice in fairly large cities.

As a result, some fine locations in smaller cities and larger towns are passed up—locations that would be immediately satisfactory from every standpoint. A medical school graduate today would do well to take a good two years internship and then locate in a smaller city or good-sized town in a prosperous agricultural community.

He would be welcome and would enjoy a pleasant recognition of his worth. He would begin at once to have a practice and develop fine friendships and grow into an important position in there.

But the trend at present is too much the other way.

F. T. H'Doubler, M.D.

Inguinal Hernia in Infants

During the last decade the surgical attitude toward inguinal hernia in infants and young children has been completely reversed. Formerly a "hands off until the child is older" attitude prevailed in the absence of complications. Today in pediatric centers, elective surgery in the absence of contraindications, regardless of age, is the rule.

In general, two technics of repair are used. A modified Ferguson type of repair[1] and simple ligation of the sac.[2] Open drop ether is the anesthetic of choice. I have followed Pott's technic in repairing some thirty inguinal hernias in infants and young children, eight less than 1 year of age, the earliest a strangulated hernia at 3 weeks of age. I have done them as an out-patient procedure, following essentially the routine proposed by MacLennan[3] of Edinburgh, Scotland, in 1914. I have experienced no mortality or morbidity in this series and I am firmly aligned on the side of Potts in the controversy of simple ligation of the sac versus any modified type of adult repair in this age group.

Briefly the technic outlined by Potts is (1) a one inch skin incision in the pubic flexion crease over the internal ring, (2) similar incision through the fascia of the external oblique parallel with its fibers exposing the cord at the internal ring, (3) cremasteric muscle split and the sac carefully isolated from the cord, if long the distal portion of the sac is left open and undisturbed, the proximal portion is ligated at the neck and the mobilized portion excised. (4) If the internal ring is large, one stitch is made to approximate the transversalis fascia about the cord (5) closure of the external oblique and skin. The sac is as thin as gossamer and must be handled as all other dissection with extreme care, twisting the sac until the neck is obliterated or the preperitoneal fat appears, to aid in the dissection.

Avery P. Rowlette, M.D.

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Fraternally Yours

From Our Notebook on the A.M.A. Interim Session

St. Louis, "The Mound City," still a great, large center of science, art and commerce, with a few notable changes in face and figure, a grand meeting place. . . . The "Old Cathedral" next to the Jefferson, a marvelous place to walk in, sit down and think things over, quiet, sequestered, midst the hurly-burly of downtown traffic, an ideal environment to quietly and devoutly ask, "What's it all about?" . . . Miss Hullings' cafeteria (11th and Locust) remains our candidate for best eating. Wish they'd put shutters on their so-lovely bakery yum-yums. Can't get out of the place, even with a full tummy, without wanting to take home parcel after parcel of delectables. . . . Schuhmacher's, down on the river, still a standout among the beaneries, as it has been for the past several generations. . . . Weather ideal, except for rainy squalls one day.

One of the biggest gimmicks in the local press, no more liquor or cigarette booths or advertising in future A.M.A. get-togethers or *Journal*. We've always felt that gambling is still gambling, even if it's called Bingo, under the auspices of a church. Perhaps the same obtains with A.M.A. advertising. . . . Much to do in papers concerning cigarettes and lung cancer, one of the big topics on the scientific show. Did you see the quotes from *Time* Magazine, Evarts A. Graham, of St. Louis?—"Dr. Ernest L. Wynder and I have reproduced cancer experimentally in mice by using merely the tars from tobacco smoke. This shows conclusively that there is something in cigarette smoke which can produce cancer. This is no longer merely a possibility. Our experiments have proved it beyond any doubt . . . the cigarette companies are trying to induce more cigarette smoking, particularly among the young . . . many of whom will become cancer victims twenty years or so from now. . . . It is certainly the moral obligation and common sense on the part of the manufacturers to support research. If we here at Washington University had more funds, we could get along faster and perhaps arrive at satisfactory conclusions within a couple of years or so."

Did you hear Winchell's Sunday night telecast? . . . "The current issue of *Time* magazine has a frightening article for cigarette smokers. It alleges that cigarette smoking causes cancer of the lung. Cancer specialists tell me the *Time's* article is an error. I am urged to report that producing cancer in mice by rubbing concentrated tobacco tar on the skin of mice does not establish that smoking cigarettes causes cancer in man. The tobacco companies, ladies and gentlemen, have taken the leadership in supporting research of all types of cancer through the Damon Runyon Cancer Fund of which I am the treasurer. Three years ago, I was told not to mention the name of the famous cigarette company which gave me our largest donation. I am now released from that pledge. American Tobacco, Lucky Strikes, a quarter of a million dollars. Thank you very much, Mr. Hahn."

. . . During the week St. Louis Medical Society's oldest member, Dr. Benjamin Shanklin, 89, died at his office. A graduate of Heidelberg, an early pathologist at the City Hospital, just recently ordered his first pair of bifocals. . . . van Gogh exhibit attracted many; long-distance winner among medics must have been Dr. and Mrs. Gussenhoven, of Holland. Hope they enjoyed it more than this reporter. To us, just plain ugly and unbeautiful—or are we simply the ignoramus?

Medical speeches, other than at meetings, included two under the auspices of Washington U., honoring "Uncle Bob" Terry, one which proved that evolution is here to stay (see our November stint), and the other on the biology of the fetus—both tying in with the beginning and the ends of man. . . . St. Louis U. folks had a big shindig honoring President McCormick of the A.M.A., and a big Golden Jubilee, with a few of the old-timers and first-class graduates present. . . . A real human interest quote from the *Globe,* in its "It Happened Here"—"Rev. Alphonse M. Schwitalla, S.J., 71 year old dean emeritus of St. Louis University School of Medicine, yesterday realized his 'second goal' in life. Father Schwitalla, who in 1948 was the first layman to receive the A.M.A.'s award for public welfare service, yesterday spoke briefly to the A.M.A. House of Delegates here. 'Being a Jesuit priest,' he said, 'precludes any possibility of my attending a conclave of Cardinals for the election of a Pope. So my next ambition has been, before I die and go to the Big Boss, to appear at least once before the House of Delegates of the American Medical Association.' ". . .

Expected explosion in House of Delegates over medical care for veterans and dependents kinda fizzled as did slap-on-the-wrist censure of the meatpacking industry health care insurance. Actually, almost no fireworks on the political front, pretty much ho-hum. . . . Biggest thrill to your reporter, the get-together of the "Grand Old Men of Medicine," when three past G.P.'s of the Year, Pressly, of South Carolina, Andy Hall, of Mount Vernon, Illinois, and Travis, of Texas, greeted current winner, Greenwell. Three of the six past-honored really got together and exchanged tall-tales with the present Pride of Kentucky, as they cavorted before television, newsreels, reporters. . . . Scuttlebutt (even including A.M.A. hired help) indicates curtains for future Interim Sessions? We dunno, just what we heard. From the so-so tempo of the last several such, they might as well fold 'em.

V. T. W.

Missouri Medical Meetings

Missouri State Medical Association Annual Session, St. Louis, April 4-7, 1954.

Component Society Meeting Dates

Audrain County Medical Society—second Thursday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p. m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

In working with physicians who are seeking locations, especially in noncity areas, the question frequently is asked "How is the indigent patient taken care of in a rural community, particularly when he or she needs surgery, hospitalization, expensive drugs or extensive medical care?" In Missouri, the answer to that question is not easy. There is no one source to go to for the answer. For the most part, each country or locality handles the problem in its own way or, in some instances, no way at all. In many, many cases it falls to the doctors alone to shoulder the entire burden of seeing that needed care is furnished the indigent patient.

Few people of this state are aware of the plans or lack of plans over the state as a whole for the care of Missouri indigent patients.

The fact finding study on medical indigency in the state is designed to place a powerful spotlight on the situation as it now exists.

It was an interesting experience the other day to sit in on a general discussion, by a group of nonmedical people, on doctors and patients. One general agreement stood out and that was: more doctors should better itemize their bills. In addition, a number present had noticed the plaque in their doctor's office which invites patients to discuss frankly with the doctor any of his services or fees. Their comments indicated that the plaques were serving the desired purpose. Another morsel of discussion centered around a statement made that too many doctors are reluctant to change their original diagnosis and treatment of a case even when later developments produce potent contrary diagnostic evidence.

Members in the News

The Association of Military Surgeons recently named **Wallace H. Graham**, M.D., Kansas City, a vice-president.

After thirty years as Superintendent of St. Luke's Hospital, Kansas City, John R. Smiley has announced his retirement. He has been succeeded by Leslie D. Reid, who has been administrator of Presbyterian Hospital, Chicago.

A singular testimonial dinner was held in West Plains in the fall, honoring Matt Prater, who was retiring after more than thirty years as a pharmaceutical detail man. Over seventy people, including doctors, druggists and other members of allied professions, paid tribute to Mr. Prater. The occasion was featured in a full page writeup in the *Greene County Medical Bulletin,* by **W. E. Wooldridge**, M.D.

Ben Eiseman, M.D., recently of the Department of Surgery, Washington University School of Medicine, is now listed as Associate Professor of Surgery, University of Colorado School of Medicine and Chief of Surgical Service, V.A. Hospital, Denver.

The Kansas Crippled Children's Commission held a clinic in Manhattan at which **James R. Elliott**, M.D., Kansas City, presided.

Kansas City radiologists were much in evidence at the 39th Annual Meeting of the Radiological Society of North America in Chicago late in December. **Ira H. Lockwood**, M.D., presided, **C. Edgar Virden**, M.D., was a member of the Board of Directors, **John W. Walker, Jr.**, M.D., was chairman of the Refresher Course Committee, and **Arthur B. Smith**, M.D., was a councilor.

New President-elect of the Missouri Hospital Association is Horace L. Burgin of Springfield. Herbert S. Wright of Cape Girardeau is President at the present. Other elected officers were **B. I. Burns**, M.D., Kansas City, Brother Bede Guyas, St. Louis, and Rev. E. C. Hofius, St. Louis.

On the first day of solicitation to furnish the additional money to complete and equip the Noll Memorial Hospital, Bethany, $25,000 was collected. Plans call for renting one wing of the building to physicians for office space, thus contributing to the upkeep of the hospital. Aside from approximately $100,000 already donated by the Noll family, physicians in Bethany have agreed to donate equipment to the new hospital.

New Columbia physician who has recently opened offices in that city is **Clarence C. Reynolds**, M.D.

J. C. Hickerson, M.D., Independence, received his 50 year Masonic pin at the annual Past Masters' Dinner of McDonald Lodge No. 324 A. F. and A. M. in that city.

Indiana native graduate, **Frank H. Zahrt**, M.D., has joined the Bethany Hospital staff after completing his intership in St. Joseph's Hospital, St. Joseph.

New officers of the Mississippi Valley Medical Society include **Arthur S. Bristow**, M.D., Princeton, President; **Murray E. Rolens**, M.D., Springfield, first vice president; **R. G. Hale**, M.D., St. Louis, second vice president.

Attendants at the Missouri State Medical Secretaries and Assistants Society fall meeting at the Connor Hotel in Joplin heard **S. W. Scorse**, M.D., speak on "The Necessity of the Medical Secretary and Assistant." Guests at the meeting were Dr. and Mrs. **Paul Walker**, Dr. and Mrs. **A. L. Saylor**, Dr. and Mrs. **Robert Kirschman**, Dr. and Mrs. **Scorse**, Dr. and Mrs. **M. H. Black**, Dr. and Mrs. **Charles Paddock**, Dr. and Mrs. **R. L. Laney**, Dr. and Mrs. **W. L. Post**, Dr. and Mrs. **Nelson Butterworth**, and Dr. **Alice Wilson**, all of Joplin. Attendants from Carthage were Dr. and Mrs. **J. B. VanUrk** and Dr. **Charles Isbell.**

Oberlin College awarded an alumni citation for "a brilliant record . . . as a practicing physician, research scholar, professor, and author" to **Robert J. Crossen**, M.D., Ladue.

The Advisory Council of the State Division of Health has approved the proposed $250,000 third floor addition to the Phelps County Hospital.

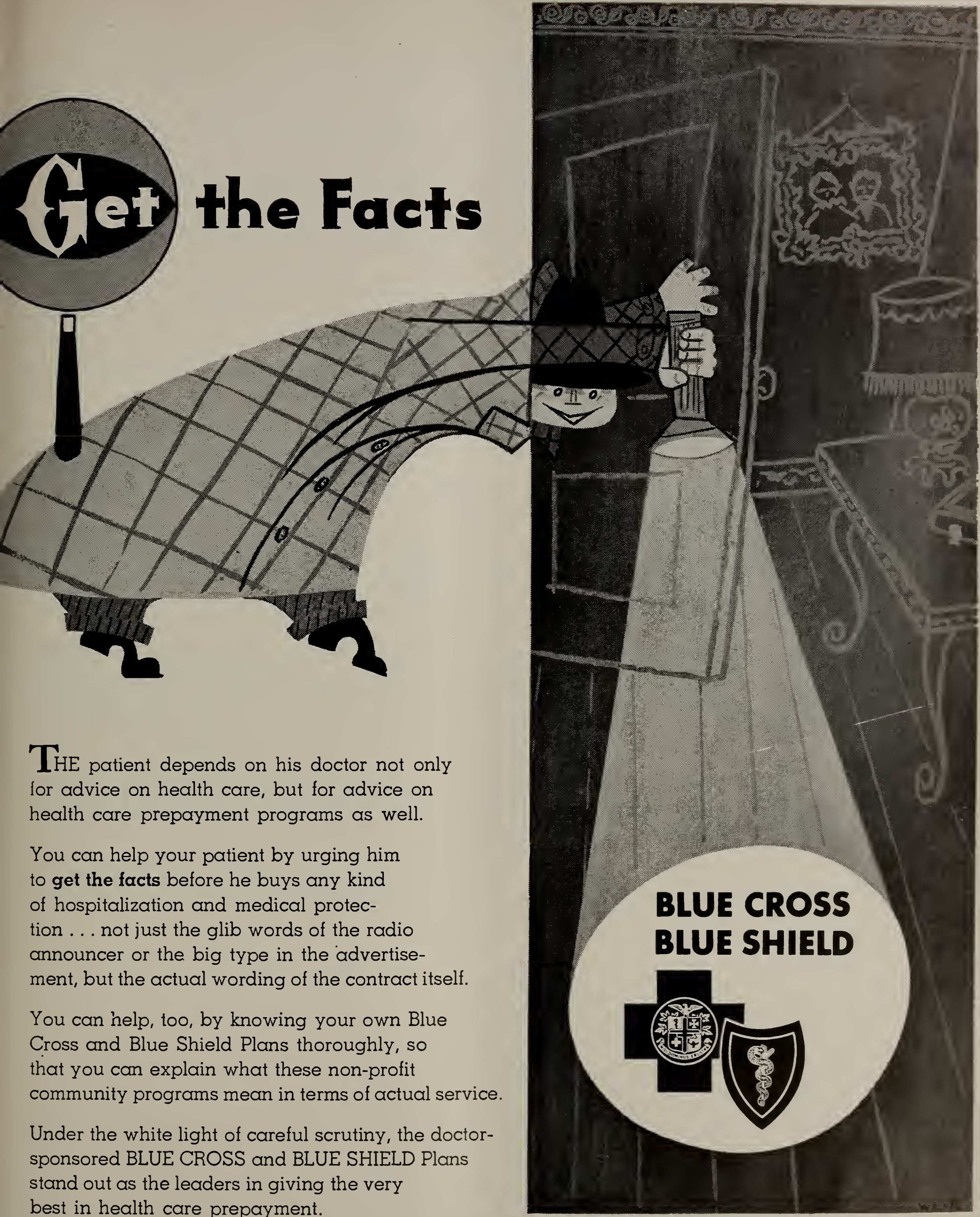
A Well Baby Clinic was held at the Poplar Bluff Hospital under the direction of Doctors **Hardin Henrickson** and **William Henrickson.** The Clinic is sponsored by the Woman's Citizenship Club and Junior Citizenship Club in cooperation with the Butler County Health Center.

The new chairman of the Southwest Missouri Chapter of the American College of Surgeons is **Winiferd Post**, M.D., Joplin. He succeeds **A. H. Lowe**, M.D., Springfield. Also elected to offices were **F. T. H'Doubler**, M.D., and **George Hogeboom**, M.D., Springfield. **Durward Hall**, M.D., is secretary-treasurer of the organization.

The first attending staff of the Chillicothe Municipal Hospital elected **Melvin Grace**, M.D., president. Both medical doctors and osteopaths took part in the organizational meeting.

In a change of location "for health reasons," **S. W. Connor**, M.D., Mountain Grove, has announced the new location of his office in that city. The Connor Memorial Hospital has been leased for use as a nursing home.

North Central Counties Medical Society officers, recently elected, are **J. S. Montgomery**, M.D., Milan; **G. E. Grim**, M.D., Kirksville; **J. B. Jones**, M.D., Kirksville.



THE patient depends on his doctor not only for advice on health care, but for advice on health care prepayment programs as well.

You can help your patient by urging him to **get the facts** before he buys any kind of hospitalization and medical protection . . . not just the glib words of the radio announcer or the big type in the advertisement, but the actual wording of the contract itself.

You can help, too, by knowing your own Blue Cross and Blue Shield Plans thoroughly, so that you can explain what these non-profit community programs mean in terms of actual service.

Under the white light of careful scrutiny, the doctor-sponsored BLUE CROSS and BLUE SHIELD Plans stand out as the leaders in giving the very best in health care prepayment.

BLUE CROSS and BLUE SHIELD
Non-profit hospital-medical-surgical plans sponsored by doctors
St. Louis **Kansas City**

The recently installed president of the Southern Medical Association is Associate Professor of Internal Medicine at St. Louis University, **Alphonse McMahon**, M.D.

In St. Louis a dedication ceremony was held for the proposed $2 million, 156 bed wing for the care of the mentally and chronically ill at Deaconess Hospital. Also the cornerstone for the $1,430,000 Renard Hospital in the Washington University Medical Center, has been laid. This building likewise will provide teaching and research facilities in the field of psychiatry.

Attendants at the St. Louis County Medical Society Meeting unanimously approved fluoridation of water supplies at their meeting at the County Health Center, Clayton.

Construction has started on the 48 bed addition to the Boone County Hospital. Local citizens contributed $120,949.05 to augment a $100,000 gift by Dr. and Mrs. **Frank G. Nifong**. Of the contributions, the local medical profession subscribed $28,725.

An Institute on Hospital Accounting was held at the University of Missouri in late fall. Hospital administrators from the entire state were present at the meeting sponsored jointly by the M.U. School of Business and Public Administration, the Missouri Hospital Association and the M.U. School of Medicine.

W. H. Minton, M.D., served as moderator for the discussion on eye problems aired over station KFEQ, St. Joseph, in December. Other members of the panel were **William H. Ames**, M.D., **Truman B. Schertz**, M.D., and **O. Earl Whitsell**, M.D.

"Adenocarcinoma of the Appendix" was the title of Dr. **Paul A. Knepper**'s paper at the Western Surgical Meeting in Chicago. He was assisted in the preparation of the paper by **R. V. Riddell**, M.D., and **G. E. Carpenter**, M.D., all of St. Joseph.

The Schering Fellowship in Endocrinology for 1953, valued at $5,000, has been awarded to **James E. Ashmore**, M.D., St. Louis. Dr. Ashmore will study at Harvard University.

The Isotope Laboratory at St. John's Hospital in Springfield opened in early winter.

Newly elected officers of the St. Louis A.G.P. were honored at a dinner dance at Norwood Hills Country Club in mid-winter.

Faith Hospital administrator **A. J. Signorelli**, M.D., St. Louis, has announced the possibility of opening the third floor of the new hospital, thus adding 60 beds.

Otto C. Hanser, M.D., St. Louis, described as being in the "youth of old age" has recently returned from part of his projected trip around the world. Having made approximately two thirds of the trip, he plans another in the near future to complete the circle.

The Missouri State Board of Medical Examiners will give an examination in Jefferson City on February 18 and 19, 1954, providing there are sufficient number of applicants. Reciprocity applications will be considered on February 8, 1954. Recent appointments to the Board are **Harry A. Klein**, M.D., St. Louis, and **Elvin D. Imes**, M.D., Maryville. These doctors replace **Walter L. Brandon**, M.D., Poplar Bluff, and **F. T. H'Doubler**, M.D., Springfield.

Dr. **Ira H. Lockwood**, Kansas City, is the new President of the Radiological Society of North America. In his presidential address Dr. Lockwood stressed the necessity for solution of medical care problems by the medical profession.

Kansas City obstetrician, **Kenneth E. Cox**, M.D., suffered head and shoulder injuries when his car was apparently sideswiped near Strasburg, Missouri. He was hospitalized at St. Luke's Hospital in Kansas City.

Aside from his discussion of "Gout" at K. C. General Hospital, Dr. Alexander B. Gutman, New York, recommended in an interview that every major hospital be a teaching unit.

The Smithville Community Hospital is readying for operation a new twenty bed wing, the third expansion in its fifteen years of operation. The new addition represents an expenditure of approximately $85,000, involving no federal, state or county assistance, according to chief of staff **Arch Spelman**, M.D.

The Tomahawk Road Homes Association, Kansas City, elected **George V. Feist**, M.D., to the Board of Directors.

The Midwest Hospital Association will hold its annual convention in Kansas City late in April. Approximately 2,000 hospital officials are expected.

A guest speaker at St. Paul's Lutheran Church, Kansas City, **Herbert C. Senne**, M.D., St. Joseph, gave an illustrated lecture about the recent convention of the Lutheran Church, Missouri Synod, at Houston, Texas.

In reference to honors received by Dr. Ernest Carroll Faust at Tulane University, New Orleans, for his medical work in tropical diseases, the *Carthage Press* said "just a Carthage kid in his time, and not of any big moneyed family, either—merely normal."

The publication *Proctology* awarded one of their three annual awards for medical writing to **Mark M. Marks**, M.D., Kansas City. His article, "Pilonidal Sinus: Treatment by Eventration," was published in the *Southern Medical Journal.*

New officers of the Buchanan County Medical Socity are **M. E. Grimes**, M.D., president-elect; **Jacob Kulowski**, M.D., president; **Harold Brumm**, M.D., vice president; **Robert W. Kieber**, M.D., treasurer, and **Allen I. Herman**, M.D., secretary for the fifth consecutive year.

Lancaster physician, **Ida M. Nulton**, M.D., who has completed over fifty-five years of medical practice, was the subject of a feature story in the *St. Louis Post-Dispatch.*

Charles Williams, M.D., has reopened his offices in Malden on a part time basis.

St. Louis University School of Medicine has received a $15,000 three year grant from Playtex Park Research Institute for investigation of Rh problems.

On the heels of a successful fund raising drive, work on the $225,000 addition to Boone County Hospital is well under way.

St. Louis Medical Society officers recently elected are **Raymond O. Muether**, M.D., president; **J. Paul Altheide**, M.D., vice president, and **David M. Kerr**, M.D., secretary. President-elect is **Daniel L. Sexton**, M.D. The officers were installed at ceremonies on January 5.

Now living with her daughter in Columbia, **Emma Thompson**, M.D., who practiced in Breckenridge for more than fifty years, celebrated her eighty-fifth birthday in mid-winter.

Remodeling of St. Joseph Hospital in Kirkwood is currently under way. The project will include the dividing of some of the fourteen wards into private and semiprivate rooms, as well as installation of modern equipment.

New associate member of the Community Clinic in Appleton City is **R. H. Brownsberger**, M.D., of Urich.

A new medical building consisting of sixteen rooms is under construction in Richmond. The property is being developed by **E. E. Gay**, M.D., Richmond.

About 200 "friends of the hospital" met at the Chase Hotel, St. Louis, to hear of plans for Jewish Hospital Medical Center, and contributed $376,000 to the fund.

Hamilton physician **Herbert Booth**, M.D., was a patient at St. Luke's Hospital, Kansas City, in mid-winter.

The January issue of *Woman's Home Companion,* in an article authored by Albert Q. Maisel, listed as outstanding hospitals in the diagnosis and treatment of cancer several Missouri hospitals. Cited as the "best of the best" are Ellis Fischel State Cancer Hospital, Columbia, Barnard Free Skin and Cancer Hospital, Barnes Hospital, De Paul Hospital, Firmin Desloge Hospital, Homer G. Phillips Hospital and St. Louis City Hospital.

Mac F. Cahal, Executive Secretary of the American Academy of General Practice, has been named adviser to the medical task force of the Hoover Reorganization Commission.

New officers of the Cape Girardeau County Medical Society are **E. D. Campbell**, M.D., president; **E. F. McDonald, M.D.**, vice president; **H. V. Ashley, Jr.**, M.D., secretary; **Thomas Otto**, M.D., treasurer; **J. T. Trollinger**, M.D., editor, and **A. M. Estes**, M.D., censor.

The Order of De Molay awarded the Honorary Legion of Honor to **Wallace H. Graham**, M.D., and their highest award, the Legion of Honor, to Don E. Woodard, D.D.S., both of Kansas City.

The Jackson County Medical Society sponsored Community Blood Bank was organized in mid-winter. No date was set for beginning of operation of the bank.

Luke E. Williams, M.D., Kansas City, was the guest speaker at the Adult Forum of the Centennial Methodist Church. Dr. Williams' subject was "Alcoholism."

"Suppurative Disease of the Lungs" was the subject of a paper given before the Ozarks Medical Society by **Hector W. Benoit, Jr.**, M.D., Kansas City. The panel discussion on chest diseases was moderated by **Lawrence E. Wood**, M.D.

A helicopter landing port for emergency service will be built atop an addition to the St. Louis Lutheran Hospital. The decision is the result of a six months investigation by board members into its feasability.

From Loma Linda, California, Dr. and Mrs. **Charles Field**, have located in Windsor. He is associated with **Claude Thurber**, M.D.

Senath physician **F. W. Speidel**, M.D., celebrated his eighty-fifth birthday in mid-winter. Dr. Speidel has practiced medicine in Dunklin county for more than fifty years.

The first outstate member of the medical profession to be named on the Medical and Scientific Committee of the Eastern Missouri Chapter of the Arthritis and Rheumatism Foundation is **Thomas L. Dwyer**, M.D., Mexico.

Work on the St. Joseph Medical Center started the first of the year. The Center, from the remodeled Missouri Theater Building in St. Joseph, will house complete clinical facilities, emergency operating rooms, and will be completely air conditioned. The Center will have eventually four floors of approximately 10,000 square feet each. Inspiration for the St. Joseph Medical Center came from Menorah Medical Center in Kansas City.

Construction on the Fitzgibbon Hospital, Marshall, is approximately four weeks ahead of schedule as of the first of the year.

The *St. Louis Globe-Democrat* reported expansion at over a dozen hospitals in St. Louis City and County. Those hospitals included are the Barnes Group, Deaconess, DePaul, Bethesda, Jewish, Lutheran, Missouri Baptist, St. Luke's, St. Joseph's, Cardinal Glennon, City Infirmary and Bliss Psychiatric Hospitals. It is estimated that the expansion programs represent an outlay of approximately $30 million.

IN MEMORIAM

Murray, Lotis V., M.D., Pleasant Hill, a graduate of Northwestern University Medical School, 1930; member of the Cass County Medical Society; aged 48; died November 23.

Skaggs, Thomas R., M.D., Mountain View, a graduate of St. Louis University School of Medicine, 1943; member of the South Central Counties Medical Society; aged 38; died November 27.

Shanklin, Benjamin, M.D., St. Louis, a graduate of Marion-Sims College of Medicine, 1892; honor member of the St. Louis Medical Society; aged 86; died December 3.

Bickel, James T., M.D., Lamar, a graduate of University Medical College, Kansas City, 1901; honor member of the Barton-Dade County Medical Society; aged 81; died December 7.

Hardin, Thomas D., M.D., St. Charles, a graduate of Barnes Medical College, 1896; honor member of the Lincoln-St. Charles County Medical Society; aged 80; died December 9.

Stahl, Fred A., M.D., Springfield, a graduate of Harvard Medical School, 1921; member of the Greene County Medical Society; aged 58; died December 11.

Dillon, William George, M.D., Salem, a graduate of Barnes Medical College, 1907; member of the Phelps-Crawford-Dent-Pulaski County Medical Society; aged 81; died December 11.

Lucas, William B., M.D., Mendon, a graduate of Washington University School of Medicine, 1879; honor member of the Chariton-Macon-Monroe-Randolph County Medical Society; aged 96; died December 14.

Mantz, Herbert L., M.D., Kansas City, a graduate of Jefferson Medical College, 1920; member of the Jackson County Medical Society; aged 57; died December 14.

Werner, August A., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1911; member of the St. Louis Medical Society; aged 70; died December 20.

Elmer, Warren P., M.D., St. Louis, a graduate of the University of Michigan Medical School, 1903; honor member of the St. Louis Medical Society; aged 74; died December 27.

Ryan, Robert A., M.D., Mountain Grove, a graduate of Chattanooga Medical College, 1903; honor member of the South Central Counties Medical Society; aged 79; died January 2.

NEW MEMBERS

Azar, Philip L., M.D., St. Louis
Bailey, Drennan, M.D., St. Louis
Banton, William C., M.D., St. Louis
Bernard, Harvey R., M.D., St. Louis
Clawson, James W., M.D., St. Louis
Crawford, Robert M., M.D., Sullivan
Edelman, Mina K., M.D., St. Louis
Ferry, J. Donald, M.D., St. Louis
Fingerhood, Marvin G., M.D., Jefferson Barracks
Giem, Ross Nye, M.D., Rolla
Goldenberg, David, M.D., St. Louis
Hasson, Robert, M.D., Moberly
Hunter, Charles H., M.D., St. Louis
Kelly, John B., M.D., Houston
Kieffer, Victor B., Jr., M. D., St. Louis
Larkin, Rosemary R., M.D., Kirkwood
Lewis, James E., Jr., M.D., St. Louis
Lutz, Martin H., M.D., Robertson
Maher, Thomas F., M.D., St. Louis
McCloskey, R. Bruce, M.D., St. Louis
Meyers, John B., M.D., St. Louis
Nichols, Charles E., M.D., St. Louis
O'Neal, Lawrence W., M.D., St. Louis
Peartree, Sherwood P., M.D., St. Louis
Peterson, Merle H., M.D., Sullivan
Repp, Theodore J., M.D., St. Louis
Schierman, William B., M.D., St. Louis
Schneider, Richard F., M.D., St. Louis
Schwartz, Melvin M., M.D., St. Louis
Serkes, Kenneth D., M.D., Philadelphia, Pa.
Smith, Robert S., M.D., St. Louis
Summers, Thos. F., M.D., St. Louis
Swarm, Richard L., M.D., St. Louis
Toms, Stephen, M.D., St. Louis
Webb, Paul B., Jr., M.D., St. Louis
Workman, George M., M.D., Hermann

Councilor District News

FIRST DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

Joseph L. Fisher, M.D., St. Joseph, presented the scientific program of the December 10 meeting of the Grand River Medical Society, Chillicothe. He spoke on "Roentgen Diagnosis of the Acute Abdomen." This was a dinner meeting of the society in conjunction with the Woman's Auxiliary. Mrs. C. A. McBurney, Slater, President of the Woman's Auxiliary of the Missouri State Medical Association, met with the Auxiliary.

Woman's Auxiliary of the Grand River Medical Society.

The last order of business at the meeting was the election of officers for 1954. They are as follows: **John Platz,** M.D., Carrollton, President; **W. A. Broyles,** M.D., Bethany, First Vice President; **John R. Dixon,** M.D., Brookfield, Second Vice President, and **E. A. Duffy,** M.D., Trenton, Secretary.

E. A. Duffy, M.D., *Secretary*

Clay County Medical Society

Seventy-two physicians attended the Annual Clay County Medical Society Clinical Conference at the Elms Hotel, Excelsior Springs, on November 5, 1953.

Speakers on the program included **W. A. Sodeman,** M.D., Professor and Chairman of the Department of Medicine of the University of Missouri, Columbia; **Russell D. Shelden,** M.D., Visiting Anesthesiologist at the Research and Menorah hospitals, Kansas City; **Frank B. McGlone,** M.D., Assistant Professor of Medicine, University of Colorado School of Medicine, Denver; **French K. Hansel,** M.D., Director, Hansel Foundation, St. Louis, and **Marc J. Masser,** M.D., Professor of Internal Medicine, University of Wisconsin School of Medicine, Madison, Wis.

The Woman's Auxiliary to the Clay County Medical Society held a concurrent meeting with that of the Clinical Conference.

S. R. McCracken, M.D., *Secretary*

SECOND DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph Counties Medical Society

In 1948, the Chariton-Macon-Monroe-Randolph County Medical Society inaugurated an annual dinner meeting of the members, their wives and lay guests, inviting an outstanding speaker. They have grown until only the largest, the Merchant's Hotel, dining room can accommodate the number of reservations requested.

On December 10, the annual meeting for 1953 was held with Dr. **Roscoe L. Pullen,** Dean of the University of Missouri School of Medicine, as the speaker on "Medical Education in Missouri." In the five years this has grown to be an event of local importance and has enhanced the public relations of the local practitioners of medicine. One hundred and forty-four persons attended this year.

Clarence C. Cohrs, M.D., *Secretary*

SIXTH DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

The West Central Missouri Medical Society held a dinner meeting on December 10 at Butler, and the wives of the doctors adorned the meeting with their presence. A charter was presented to Dr. **Roy W. Pearse, Jr.,** President of the Society, by Dr. **Victor B.**

Speakers table at the Clinical Conference dinner.

Charter presented to West Central Missouri Medical Society.

Buhler, Kansas City, Chairman of the Council of the Missouri State Medical Association. The society actually came into being in June, 1953.

Following the presentation of charter, Dr. Buhler addressed the group using as his title "It Is Your Ship." He discussed various important matters of particular interest to the doctors of this state. Following Dr. Buhler's formal address a general discussion period was held. At this time the ladies adjourned for a separate meeting where they formally organized an Auxiliary.

West Central Missouri Medical Society meeting of December 10

The last part of the evening's program consisted of the election of officers for 1954. The officers are: **Roy W. Pearse, Jr.**, M.D., Nevada, President; **Carter W. Luter**, M.D., Butler, Vice President, and **O. B. Barger**, M.D., Harrisonville, Secretary-Treasurer. The attendance at the meeting was twenty-seven.

O. B. BARGER, M.D., *Secretary*

EIGHTH DISTRICT

W. S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

The Ozarks Medical Society and its Auxiliary held its December meeting on Tuesday night, December 8, at the State Tuberculosis Sanatorium in Mt. Vernon. The Society members and their wives were guests of the State Sanatorium for the evening.

Dr. Paul Murphy addresses Ozarks Medical Society.

The scientific program was furnished by the Missouri Academy of General Practice in cooperation with the Missouri Trudeau Society and the Missouri Chapter of Chest Physicians as a panel discussion on "Chest Disease." The Moderator was **Lawrence Wood**, M.D., Kansas City, President, Missouri Chapter, American College of Chest Physicians. **Hector W. Benoit, Jr.**, M.D., Kansas City, spoke on "Suppurative Disease of the Lungs"; **William A. Werner**, M.D., St. Louis, President, Missouri Trudeau Society, on "Acute Pneumonia"; **Paul Murphy**, M.D., St. Louis, Chairman, Committee on Tuberculosis, Missouri State Medical Association, and President, Missouri Tuberculosis Society, on "Processing the Patient With a Positive X-Ray," and **Ellis Lipsitz**, M.D., St. Louis, on "Chemotherapy of Chronic Lung Disease." Thirty-two doctors were in attendance at this interesting meeting.

The election of officers for 1954 concluded the evening program. The new officers are: Dr. **C. A. Brasher**, Mt. Vernon, President, and Dr. **Charles A. Spears**, Pierce City Secretary.

C. A. SPEARS, M.D., *Secretary*

NINTH DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries Counties Medical Society

The December meeting of the Phelps-Crawford-Dent-Pulaski-Maries Counties Medical Society and its Woman's Auxiliary was held in Rolla, on Thursday night, December 17, beginning with a dinner at 6:30 p.m.

The scientific program for the evening was under the auspices of the Missouri Academy of General Practice in cooperation with St. Louis University Medical School as follows as a panel discussion on "Newer Drugs in the Management of Hypertension," by **John Hammond**, M.D., St. Louis; **James P. Murphy**, M.D., St. Louis, and **Donald W. Bussman**, M.D., St. Louis. This proved to be a most interesting and practical scientific presentation.

M. K. UNDERWOOD, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner at the Horton Hotel in Willow Springs on Wednesday night, December 16, with the following members and visitors present: Drs. **R. W. Denney**, **S. W. Connor** and **A. C. Ames**, Mountain Grove; **T. J. Burns**, Houston; **M. B. Perkins** and **Paul A. Davis**, Willow Springs; **Rollin H. Smith**, West Plains, and **H. W. Miller**, Chicago, and the wives of several of them.

After dinner all went to the home of Dr. Davis where the ladies met in one room and the meeting came to order in another. Dr. Miller spoke on "The Acute Gall Bladder" and then the minutes of the last meeting were read and approved, also a financial statement was read showing over $100 in the treasury. Then was read a letter asking approval of the Ozark Regional Cardiac Consultation Clinic, which was granted by unanimous vote. It was then voted to put Dr. **H. L. Reed**, Licking, on the Honor Roll exempt from payment of dues and to send Dr. **E. C. Bohrer**, West Plains, a "Get Well" card.

The next in order was election of officers, which resulted as follows: Dr. **M. B. Perkins** took his place as president, and Dr. **Cooper** was elected president-elect, Dr. **Ames** was reelected as Secretary-Treasurer. Censors: **Rollin H. Smith,** M.D., three years, **T. J. Burns,** M.D., two years, and **R. W. Denney,** M.D., one year. Delegates and alternates as follows: Wright County, **S. W. Connor,** M.D., delegate; **R. W. Denney,** M.D., alternate; Texas County, **Garrett Hogg,** M.D., delegate; **J. B. Kelley,** M.D., alternate; Howell County, **M. B. Perkins,** M.D., delegate; **J. N. Wiles,** M.D., alternate; Douglas County, **M.C. Gentry,** M.D., delegate; no alternate; Oregon County, **C. W. Cooper,** M.D., delegate; no alternate; Ozark County, **Deborah Doan,** M.D., delegate; no alternate. The meeting then adjourned to meet in West Plains January 20.

A. C. AMES, M.D., *Secretary*

Joseph I. Greenwell, M.D.

A.M.A. "Family Doctor of the Year"

(Exclusive Interview for MISSOURI MEDICINE)

Each year the A.M.A. selects a "General Practitioner of the Year." We always try for an exclusive interview with these honored gentlemen. Our interview with Dr. Greenwell had an unusual start. As we were introduced, he asked, "Are you an M.D.?" then scanned over our visitor's badge and snorted, "Here, come on over and give me my shot of insulin."

Eighty year old Dr. Greenwell was born and raised in the "Abraham Lincoln country of Kentucky," and for fifty-three years has served Nelson, Hardin, LaRue and Marion counties within a radius of twenty-five miles of New Haven, his home. Actually, he was born in Balltown, Kentucky, November 27, 1873. He was educated in the Nelson County public schools, and received his B.A. and M.A. degrees at Cecilia College. As a school teacher, he met a young doctor who convinced him he should study medicine. He obtained his M.D. degree in 1900, at the Louisville Hospital College of Medicine.

During these years, he has experienced almost every type of medical-surgical-obstetrical emergency. He has made calls on horse-back, with horse and buggy, on a sled, in rowboats and once on a switch-engine. He remembers distinctly his first 1910 red Maxwell, sometimes not as serviceable as the old horse and buggy with the charcoal foot-warmer. With no drugstore in New Haven (population around 800), Dr. Greenwell has compounded and dispensed his own drugs, including many thousand placebos; on many occasions, the help of mid-wives has been important.

His formula for longevity is very simple: "I believe in getting plenty of sleep, no smoking and a rare drink of bourbon." This seems surprising, in that tobacco and bourbon are two of Kentucky's best known products, and within twenty miles of home are the largest of all Kentucky's famed distilleries.

Along health lines, Dr. Greenwell has observed an appreciable improvement through the years, most attributable "to diphtheria and typhoid immunizations, and to the miracle drugs," as well as insulin and other modern therapies. He still thinks "hominy grits, sowbelly, sorghum molasses, turnip greens and bourbon" is not a bad diet, however.

Dr. Greenwell's family life has always been happy and full. An ardent Catholic, he attends Mass every morning at six, and during the war years gave medical services to Gethsemane Abbey and other ecclesiastical facilities, with the total population numbering several hundred. He now has eight living children, twenty-five grandchildren, and one great grandchild. The Dr. and Mrs. Greenwell (Marie M. Rapier, former president of the Kentucky State Ladies Auxiliary, who died in 1950), had twelve children, one an M.D. who died during World War II, another a premedic killed in action in World War II. The others "have not taken to medicine," except a daughter who is a technician.

Most of Dr. Greenwell's practice has been in the office (in his home) and in the patients' homes. He has delivered 4,376 babies, these deliveries being made in log cabins, huts, barns, but since 1948, in the new Flaget Memorial Hospital, at Bardstown.

Dr. Greenwell related two episodes with a humorous twist. Early in practice the obstetric patients resented "scrubbing-up" before delivering them—"That new doctor is kinda stuck-up—he was afraid to get his hands dirty on me." He well remembers the similar consternation, when he introduced rubber-gloves. Again, on one occasion, "You're not gonna' wash me off, young man. I've had many children, and you're not s'posed to be washed off down there, or even change your sheets for two weeks after a baby's born."

The late Dr. Irvin Abell, of Louisville, would jokingly relate, "As soon as I saw a slat on that patient, I knew who sent him in without asking," in his lectures emphasizing the importance and efficacy of early immobilization.

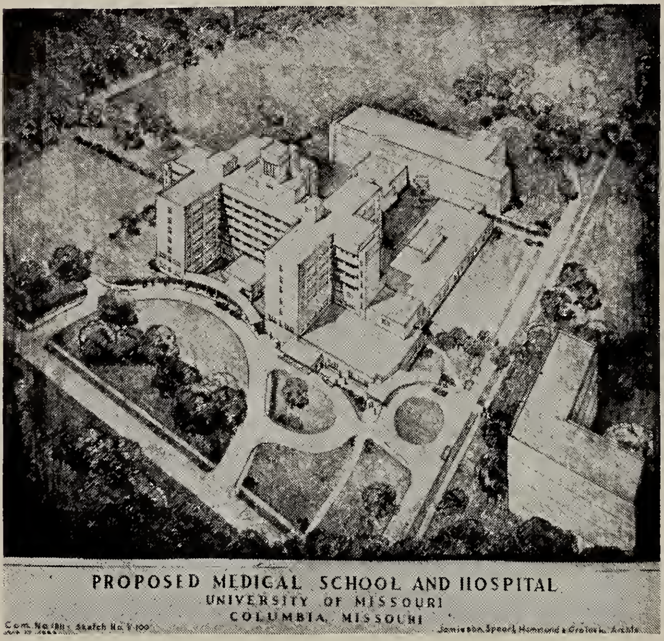
Medicine is not alone, with Dr. Greenwell: For 25 years, a member of the New Haven Board of Trustees; for 14 years, Mayor. During this time the first sidewalks and street lights were installed; the community developed a public waterworks. These civic activities were in addition to the many years he served Nelson and Muldraugh Hill Medical societies and his thirty years as a councilor of the Kentucky State Medical Association.

As we watched Dr. Greenwell thumb through the scrapbook, prepared by his friends as a surprise for this great occasion, with letters from the Governor of Kentucky, the Archbishop of Louisville, from judges, congressmen (including a commission as a Kentucky Cuhnul, suh), and as he told of his 80th birthday celebration, "an Open House last Sunday," attended by hundreds of three generations, a mistiness came to his eyes, a little more tremor to his hands, with just a faint quaver in his voice, as he reminisced on his life, as he told his simple credo: "I've always tried to take the best care I could of all the people in my community, this honor is something I've always wanted, and this is the greatest day in my life." V. T. W.

News From Missouri's Three Medical Schools

UNIVERSITY OF MISSOURI

The Board of Curators of the University of Missouri has accepted bids totaling more than seven million dollars for the construction of a new 441 bed University Hospital on the campus in Columbia. The Hospital will be eight stories high, finished in buff brick with a stone trim. Clinical offices, classrooms and teaching laboratories are integrated into the building.



Doctor Howard Rusk, Department of Physical Medicine and Rehabilitation, New York University, addressed the students on December 4 on the subject, "The Responsibility of the Physician in These Troubled Times."

Doctor Charles M. Pomerat, Professor of Cytology, University of Texas Medical Branch, Galveston, addressed a general assembly of faculty and students on December 14 on "Tissue Cultures in Experimental Biology and Medicine."

WASHINGTON UNIVERSITY

The Washington University Medical Society elected new officers, all members of the School of Medicine staff, in December as follows: Dr. Thomas H. Burford, president; Dr. Roy R. Peterson, vice president; Dr. Carl G. Harford, secretary; Dr. Ralph S. Woolf and Dr. William G. Klingberg, members of the council. The Medical Society meets several times each year to inform staff members and students of research conducted at the School of Medicine.

Dr. Griffith R. Harsh, III, assistant in neurosurgery at the School of Medicine, was awarded first prize of $250 in the St. Louis Medical Society Essay Contest for his paper describing a new procedure whereby excess fluid formed in the brain of children is shunted into the abdominal cavity, using the fallopian tube as the connection. The work was done in the Washington University Medical Center with funds provided by the School of Medicine.

The American Board of Surgery held examination Part II for certification of ninety-six candidates at the Washington University Medical Center on December 14 and 15. Candidates applying for certification came from various parts of the country, chiefly from the Middle West.

ST. LOUIS UNIVERSITY

Some 460 alumni and guests of the Saint Louis University School of Medicine attended the Golden Jubilee Reunion Dinner Dance at the Starlight Roof, Chase Hotel, Wednesday evening, December 2, during the Clinical Session of the American Medical Association. Guests included Dr. Edward J. McCormick, president of the AMA and a graduate of Saint Louis University in 1915; the Reverend Francis J. O'Reilly, S.J., vice president in charge of development, Saint Louis University; the Reverend Alphonse M. Schwitalla, S.J., dean emeritus of the Saint Louis University School of Medicine; Dr. James W. Colbert, Jr., dean of the School of Medicine, and Mrs. Colbert, and the Reverend Edward T. Foote, regent. Two members of the class of 1903 attending the reunion were Dr. Clyn Smith (retired) of Clovis, New Mexico, and Dr. A. S. Steiner of Saint Louis. Also honored were the Classes of 1928 and November 1943.

Prior to the cocktail party and dinner dance at the Chase Hotel, the Phi Beta Pi Fraternity held a reunion for its alumni at the Chapter House, 3501 Lafayette. The fraternity has recently completed an extensive remodeling and redecorating project at the fraternity house. Among the guests were Dr. McCormick, Dr. Harry M. Gilkey, Kansas City, highest national officer of the fraternity, and Dr. Smith, who was one of the founders of the Saint Louis University Chapter, Father Foote, and Dr. Colbert.

PROPOSED AMENDMENTS ON TABLE FROM 1953 ANNUAL SESSION

At the 1953 session of the House of Delegates, the following amendments to the Constitution of the Missouri State Medical Association were introduced from the floor by Henry Allen, M.D., St. Louis:

Amend Article VII. Officers. Sec. 2, by deleting the period and adding the following words "and no Councilor may be reelected to serve more than three consecutive terms" and deleting the period and adding the following words "and may not be reelected to serve as officer or Councilor for more than six years" so that the section shall read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years and no Councilor may be reelected to serve more than three consecutive terms. The Secretary and Treasurer shall be elected by the Council and may not be reelected to serve as an officer or Councilor for more than six consecutive years. The delegates present from each Councilor District shall meet on the morning of the last day of the Annual Session and elect the Councilor from the district. In the event of death, resignation or removal of any Councilor, the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

The following amendment was introduced in the form of a resolution by Ralph E. Duncan, M.D., Kansas City:

Amend Article VII. Officers: Sec. 2, by deleting the words "The Secretary and the Treasurer shall be elected by the Council," so that the section shall read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years. Half of the membership of the Council shall be elected each year. The delegates present from each Councilor District shall meet on the morning of the last day of the Annual Session and elect the Councilor from that district. In the event of death, resignation or removal of any Councilor the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

The Reference Committee, of which George V. Herrman, M.D., Kansas City, was chairman, presented the following proposed amendment in order that the Constitution would correspond with an amendment to the by-laws adopted at the 1953 session on the time of meeting of delegates for the election of Councilors.

Amend Article VII. Officers. Sec. 2, by deleting the words "shall meet on the morning of the last day" and insert in lieu thereof "shall meet prior to the last day" so that the section when amended will read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years. Half of the membership of the Council shall be elected each year. The Secretary and Treasurer shall be elected by the Council. The delegates present from each Councilor District shall meet prior to the last day of the Annual Session and elect the Councilor from that district. In the event of death, resignation or removal of any Councilor, the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

In accordance with Article XI. Amendents, the Constitution may be amended by a two third vote of the delegates present and voting at any Annual Session, provided the amendment shall have been presented in open meeting at the previous Annual Session and have been published twice in the JOURNAL of the Association or sent officially to societies at least two months prior to the session. The proposed amendments were published in the July issue of the JOURNAL, this being the second publication.

Book Review

THE HISTORY OF AMERICAN EPIDEMIOLOGY, by C. E. A. Winslow, D.P.H., Professor Emeritus, Yale University School of Medicine; Editor, *American Journal of Public Health;* Wilson G. Smillie, M.D., Professor and Chairman, Department of Public Health and Preventive Medicine, Cornell University Medical College; James A. Doull, M.D., Medical Director, Leonard Wood Memorial (American Leprosy Foundation); John E. Gordon, M.D., Professor and Chairman, Department of Epidemiology, School of Public Health, Harvard University. Edited by Franklin H. Top, M.D., Professor of Epidemiology and Pediatrics, College of Medical Sciences, University of Minnesota, Sponsored by the Epidemiology Section, American Public Health Association. The C. V. Mosby Company, St. Louis, 1952. Price $4.75.

The authors of this monograph have brought to their task knowledge and scholarly treatment. The first four chapters were presented in part at the Twentieth Anniversary Session of the Epidemiology Section of the American Public Health Association held in New York City, October 27, 1949.

Publication of the four papers subsequently augmented was decided upon after consultation with the authors and with the executive secretary of the American Public Health Association. The monograph is therefore sponsored by the Epidemiology Section of the American Public Health Association, with the consent of the parent organization. The book is edited by Franklin H. Top, M.D., Professor of Epidemiology and Pediatrics, College of Medical Sciences, University of Minnesota.

The first chapter, by Winslow, considers the Colonial Era and the First Years of the Republic. The second chapter, by Wilson G. Smillie, considers the Period of Great Epidemics in the United States (1800-1875). The third chapter considers the Bacteriological Era (1876-1920), by James A. Doull. The fourth chapter comprises the Twentieth Century, Yesterday, and Tomorrow (1920—), by John E. Gordon. There are 167 pages of text and about 22 pages of index.

Since the top authorities (and I do not wish to be facetious about the name of Franklin H. Top) have written this book, it goes without saying that it is authoritative. All interested in the history of epidemic disease in this country would do well to read this book. It is a complete story, written in an interesting fashion. I recommend it highly. R. B. H. G.

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℞: Common Sense

Antacids

Jesse D. Rising, M.D.

It used to be pretty easy to prescribe antacids when Sippy's powders were the ultimate and when everyone knew that the chief enemy of the human body was "an acid condition." But no more! Now one is faced with literature detailing the dangers of "compensatory acid rebound" and systemic alkalosis. Furthermore, one hears about systemic and nonsystemic antacids, adsorbents, ion exchange agents and amphoteric substances. With all this the poor practitioner is in something of a quandary.

A look at the current edition of the "Modern Drug Encyclopedia" reveals over 125 antacids listed. All but five or six of these are proprietaries which range from mixtures rich in bicarbonate of soda to the ultra-modern ion exchange resins. There are basically only a few important antacids, and if the physician understands them he will not be so confused to the point that he will abdicate his responsibility to prescribe for his patients to the pharmaceutical manufacturers.

A few general principles may help to clear up the situation. A systemic antacid, one which may cause alkalosis, supplies fixed base (usually sodium) which is absorbable. Sodium bicarbonate is the prime example of this type of antacid. Nonsystemic antacids react with hydrochloric acid in the stomach to form neutral salts only to reverse the reaction in the alkaline medium of the small intestine where there is an excess of alkali. For example, calcium carbonate reacts in the stomach to form calcium chloride, carbon dioxide and water. The calcium chloride is changed back to calcium carbonate in the intestine so that the drug is excreted in its original form and there is no net change in the body's acid-base balance.

Sodium bicarbonate is the only common antacid that supplies absorbable alkali. It is responsible for most of the alkalosis found in patients treated with Sippy powders and the older mixtures, and was employed because of its prompt action. This is now considered undesirable because it leads to a compensatory hyperchlorhydria or "acid rebound." The rapid liberation of carbon dioxide is stimulating to the gastric mucosa. In a word, sodium bicarbonate is unsatisfactory.

Magnesium oxide is quite effective, and would be ideal except that it is excessively laxative. In fact, it is used for that purpose in the Sippy powder No. 2, to counteract the constipating effect of Sippy No. 1 which contains calcium carbonate. Both Sippy powders contain sodium bicarbonate. Magnesium oxide is a nonsystemic antacid.

Aluminum hydroxide and aluminum phosphate are also nonsystemic. Their action is quite slow, but their chief drawback is that they tend to be constipating. Magnesium trisilicate is slightly laxative, and has been used in combinations with aluminum hydroxide. Its laxative effects are often not sufficient to counteract the astringency of the aluminum. The aluminum hydroxide combines with phosphorus in the intestinal tract, and under some circumstances may lead to phosphorus deficiency. To avoid this, aluminum phosphate was introduced, but it does not seem to be a particularly important addition to our materia medica.

Aminoacetic acid with calcium carbonate and dihydroxy aluminum aminoacetate have enjoyed a modest popularity, but there is no convincing evidence that they are in any way superior to calcium carbonate or aluminum hydroxide. Whether the addition of gastric mucin to aluminum hydroxide and magnesium trisilicate materially improves the therapeutic effect remains to be seen, but the combination would seem logical.

Polyamine-methylene resins are capable of binding gastric acid by adsorption or by ion exchange. Either mechanism can be reversed in the small intestine so that there is no net change in the systemic acid-base balance, the resin being excreted unchanged. Some patients object to its taste, and nausea is reported by a few. Therapeutic results have not been outstanding.

Bismuth subcarbonate is mentioned only to point out that it is actually not an antacid. Most authorities even question its ability to coat the gastric mucosa or ulcer.

Some of the more common antacids and their preparations are listed in the following table. The prices are approximate retail prices per dose.

	Price in Cents
Aluminum Hydroxide Preparations	
Aluminum hydroxide gel (U.S.P.)	3
Tablets dried aluminum hydroxide gel (U.S.P.)	1
Tablets Alkagel	4
Al-U-Creme	3
Creamalin	4
Tablets Creamalin	2
Amphogel	4
Tablets Amphogel	2
Aluminum Phosphate Preparations	
Phosphaljel	8
Magnesium Trisilicate	
Tablets magnesium trisilicate	2
Aluminum Hydroxide and Magnesium Trisilicate	
Gelusil	4
Tablets Gelusil	4
Aminoacetic Acid and Calcium Carbonate	
Liquid Titralac	5
Tablets Titralac	3
Dihydroxy Aluminum Aminoacetate	
Magma Alzinox	4
Tablets Alzinox	5
Gel Doraxamin	3
Tablets Doraxamin	5
Aluminum Hydroxide and Gastric Mucin	
Tablets Mucotin	5
Polyamine-methylene Resin	
Tablets Exorbin	4
Capsules Resinat	6
Tablets Resinat	6

The economy of a medication is only important if the drug is effective. A good antacid must, of course, be capable of neutralizing gastric acid, but besides this it should not permit the absorption of free base which could result in alkalosis, and it should not cause constipation or diarrhea. The choice of an antacid is no more important than the method of its administration: it should be given on a regular schedule when the stomach is not protected by food. It is also desirable to give it in a form that is optimally effective such as a colloidal suspension or as a suspension of small particles in water. Tablets that require chewing are not particularly satisfactory, but they are widely used because of their convenience.

Many gastroenterologists have quit using the newer agents, and have returned to the older, tried-and-true combinations of calcium carbonate and magnesium oxide because of their effectiveness, economy and flexibility. A good starting prescription is:

℞ Heavy magnesium oxide	30 grams
Calcium carbonate	60

Sig: One-half teaspoonful in water.

This will rarely constipate a patient or cause diarrhea, but if either should occur, the formula can be changed as necessary: less magnesium oxide if there is diarrhea; more if constipation. The cost per dose of this medication is usually about 1 cent. The inconvenience of a bulk powder for the working man can be lessened if the patient will purchase a few pill envelopes from his druggist and measure a dose into each. The envelopes can be folded and secured with a rubber band. They can be reused day after day.

Using a basic formula such as given, the harried practitioner can forget all the hocus-pocus that is so confusing and settle down to thinking about the best way to manage his patient.

Letters to Missouri Medicine

International College of Surgeons

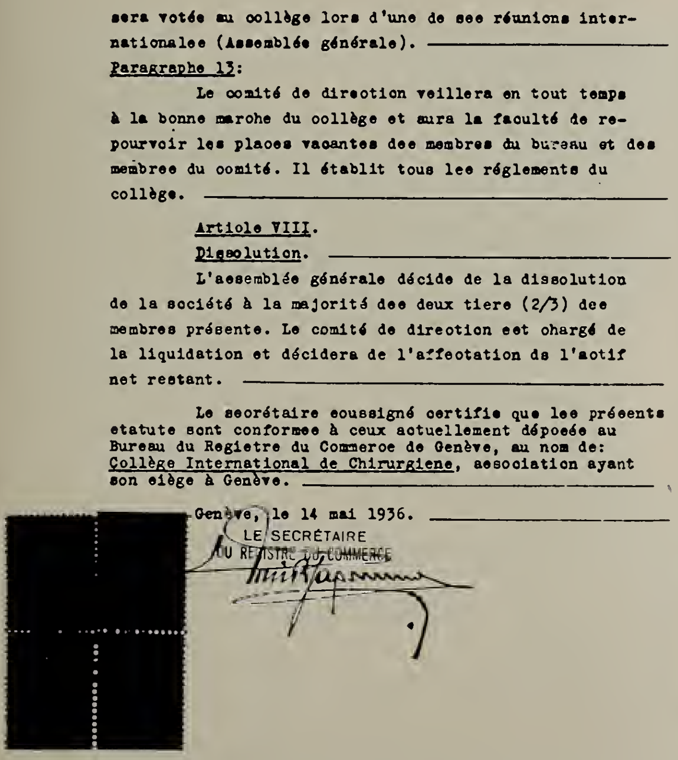
International College of Surgeons
United States Chapter

1516 Lake Shore Drive
Chicago 10, Illinois
December 12, 1953

To the Editor:

In the interest of truth and fairness, I respectfully request publication of the following facts to correct misstatements made by Dr. Evarts A. Graham in the December 1953 issue of Missouri Medicine.

(1) Dr. Graham says that the International College of Surgeons "used to claim to have been founded in Geneva, Switzerland." The International College of Surgeons still so claims. I am appending photostatic copies of the papers of foundation in Switzerland in 1935 and in Washington, D. C., in 1940.



sera votée au collège lors d'une de ses réunions internationales (Assemblée générale). ——————

__Paragraphe 13__:

Le comité de direction veillera en tout temps à la bonne marche du collège et aura la faculté de repourvoir les places vacantes des membres du bureau et des membres du comité. Il établit tous les réglements du collège. ——————

__Article VIII.__

__Dissolution.__ ——————

L'assemblée générale décide de la dissolution de la société à la majorité des deux tiers (2/3) des membres présents. Le comité de direction est chargé de la liquidation et décidera de l'affectation de l'actif net restant. ——————

Le secrétaire soussigné certifie que les présents statuts sont conformes à ceux actuellement déposés au Bureau du Registre du Commerce de Genève, au nom de: __Collège International de Chirurgiene__, association ayant son siège à Genève. ——————

Genève, le 14 mai 1936. ——————

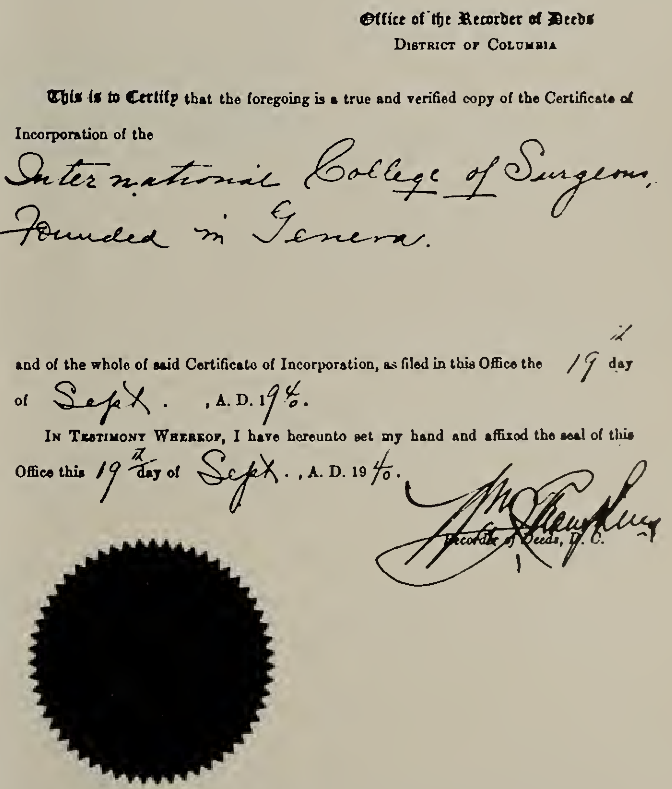
LE SECRÉTAIRE
DU REGISTRE DU COMMERCE

(2) The statement that a suit is pending against the American College of Surgeons or against Graham, instituted by the International College of Surgeons, is not true. No such suit exists or ever existed.

(3) The statement that the International College of Surgeons "claims affiliation with the League of Nations" is also not true. No such claim has ever been made.

(4) The statement that Dr. Graham was recently elected President of "the International Congress of Surgeons" is also incorrect. There is no such organization. He was elected President of the International Surgical Society in October 1953.

(5) Dr. Graham's fear of his reputation being damaged by having his name connected with the International College of Surgeons is unfounded. Thousands of Fellows of the American College of Surgeons and American Boards of Surgery are also Fellows of the International College of Surgeons. The excellent cooperative spirit between the members of these organizations is self-evident.



Office of the Recorder of Deeds
District of Columbia

This is to Certify that the foregoing is a true and verified copy of the Certificate of Incorporation of the International College of Surgeons, Founded in Geneva.

and of the whole of said Certificate of Incorporation, as filed in this Office the 19 day of Sept., A. D. 1940.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of this Office this 19 day of Sept., A. D. 1940.

Recorder of Deeds, D. C.

The President of the International College of Surgeons is Prof. Dr. Hans Finsterer of the University of Vienna, a world renowned surgeon and educator; and its President-elect is Prof. Dr. Rudolf Nissen, Head of the Department of Surgery of the University of Basel, Switzerland, who distinguished himself by performing the first successful pneumonectomy—an honor erroneously ascribed to Graham. It would fortify Dr. Graham's reputation if he would relinquish to Professor Nissen any honors he has received on that score.

The International College of Surgeons is not alone in being the object of Dr. Graham's attacks. He has also locked horns with the American Academy of General Practice, the backbone of organized medicine.

The galaxy of eminent surgeons of the world on the roster of the International College of Surgeons proudly point to the record of its scientific and humanistic ideals carried into action.

Finally, whatever Dr. Graham chooses to do or say, both the American College of Surgeons and the International College of Surgeons will continue harmoniously in their constructive work—one on a National, the other on an International basis—in the American spirit of good will and fair play.

Max Thorek, M.D.

A Country Doctor

Steelville, Mo.

To the Editor:

You may be interested in two quotations (*St. Louis Globe-Democrat,* November 16):

"The career of a country doctor is dependent very much on his wife.

"He who loves Venus or Bacchus should not practice in a rural community, he should go to a big city."

These statements were made by Dr. Robert Lischer, when the people of Mascoutah, Illinois, gave him a big party and presented him with a gold loving cup for his fifty years of service as a general practitioner. Dr. Lischer was a graduate of Washington University and I am proud to state that I was one of his young instructors. The specialist in the city may receive some professional honors but can never be thrilled by the assembly of a large crowd—his former patients. Over five hundred persons were there.

No doubt, he inculcated some valuable hygienic rules in the home and office and these will be transmitted to the next generation. The modern hospital does not teach the patients much, for they are patients not friends. What can the modern mother learn in a hospital?

Economy, also, I have no doubt, filled an important corner in the service of this country doctor. Our medical students are not drilled in this necessary proficiency. One should read the article by Ann Cutler (*Nation's Business,* October 1952) in which the dilemma of the modern hospital is clearly portrayed. The virtue of economy does not stand out conspicuously, for our Blue Cross members want to get the worth of their money. In fact, even the doctors are disagreeably harassed by their patients who would rather go to a hospital than stay at home. It has become the style!

Here is what Dr. Lischer reported.

"We have less than 5 per cent enter the hospital for delivery of a baby. When a prospective mother asks me to make an appointment at the hospital for her, I always discourage her and tell her she will be better off at home!"

"Up to the present time I have not lost a single obstetric case by death (estimate 1,500 cases).

"I never had a still-born baby."

I wonder if any of our practitioners of Missouri can match this record.

The rivalry between the hospital and the practitioner who works in the home and his private office is continually getting more tense. The hospital and clinics are growing all the time. The result is that most of the hospitals are overcrowded and many of them face an enormous deficit.

But the old doctors are leaving us and the young men are not trained in economics; consequently, they prefer to have the patient taken to a hospital rather than spend a half hour or more to instruct the mother and wife in home nursing care. "We carry insurance."

It was with great satisfaction that I read a pamphlet, written by M. A. Seidenfeld, M.D., and issued by the "National Foundation for Infantile Paralysis." I quote:

"Keep in mind that no matter how good the hospital and staff, no matter how much care may be given there to your child 'there's no place like home.' Home is where loved ones live, where we feel protected and secure, where tender loving care can be found."

For many years I have advised that little patients suffering from infantile paralysis be treated in the home (Synopsis of Pediatrics).

"As soon as a hospital becomes a substitute for home, and doctor and nurse become substitutes for mother and dad, then parents are really not standing by their child, but are hiring, or allowing someone else to hire, professional parents for him."

It is with considerable anguish that hospitalization has become the style—in obstetrics for example—when it is not needed. Of course, as in poliomyelitis, the doctor should decide if hospitalization is necessary. It is the present fad to break all rules of economy and send the multipara to a hospital so she can obtain complete relief of labor pains. Oh tempera! or mores! Sending every parturient woman to a distant hospital seems to me one of the deplorable tendencies of modern times.

There is one great obstacle. How can the many hospitals secure interns and nurses? Let the rural physician be content with the safety and efficiency of practice in the home—and be taught its economic and social importance.

John Zahorsky, M.D.

Civil Defense—Apathy?

Kansas City, Mo.

To the Editor:

Civil Defense has been praised, damned and just plain talked about by most people and, in many cases, the conclusion reached is that little is being done. Considering the magnitude of the job, this may in a sense be true, although many people have given generously of time and energy to prepare an organization.

Perhaps the problem in Civil Defense planning is something like that of the lady shopper who finds her parked car hemmed in on all sides, in front and in back, by parked trucks. To further complicate the problem, consider the lady to have no hands—what do we do now, and how, is the usual dilemma facing anyone in Civil Defense. Criticism comes easily, yet remember that the people you criticize in Civil Defense are, for the most part, volunteers, and none concerned is gifted with unlimited time, divine wisdom nor has he reasonable precedent to use as a guide.

They have little or no money to use for even the few

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things which are certain to be necessary, and even more difficult is it to decide what is necessary or how to apportion those small expenditures that can be made.

The "apathy of the people" is much mentioned. Most people to whom I have talked are not apathetic with regard to Civilian Defense, but have no idea what to do. Their offer of service to the local Civil Defense office has evoked no response or the job offered was one impossible to fit into their daily routine. Being frustrated, they throw up their hands in despair and turn to other, less depressing things. Theirs is not apathy, but a natural distaste for an unpleasant but seemingly necessary job which once attempted with no result is quickly discarded in the hope that perhaps it "really isn't necessary."

The question must therefore be placed squarely up to the "people," the civilians who are to be defended. Do you want Civilian Defense? If so, you must pay for it, either with your own effort or your own money, and the latter means "more money" for it will not be cheap. It means that a second life or auxiliary existence for the individual must be planned. A few paid individuals cannot make this organization more than lines on a piece of paper. Even the plans which are now in existence have cost considerable time and money. To have these plans turn into a real organization which will do what we hope it will do (we hope they are never used) means that every individual must have a place in the organization, and each must be planned for, not by name perhaps, but, at least, as a person who must be fed, housed and cared for. This will take more than the time of the mystical "THEY" who run Civil Defense, even in its planning stages. In effect, this is asking that a few individuals plan, organize and direct for an entire population center with complete accuracy and efficiency and with no cost to anyone. If this sounds impossible, remember that this is roughly what "THEY" are facing at the present. To say the least, this cannot be done in a few meetings nor can it be developed by one or two people. It can come about only by each able individual participating and maintaining his own interest. This job is as daily and continuous as your everyday work. It is for "YOU"—not "THEY."

Everyone's job is to get behind this effort with encouragement, help and, above all, patience. If you think you are frustrated and discouraged, think how "THEY" feel. If you are helping, you are "THEY."

J. E. Schiffmacher, M.D.

Book Reviews

Heredity in Uterine Cancer, by Douglas P. Murphy, M.D., F.A.C.S. A Commonwealth Fund Book. Harvard University Press. 1952. Price $2.50.

"Am I going to develop cancer because my mother had it?" That is the question so often asked the clinician and it is the reason for the statistical study reported in this small volume. A formidable array of experts in the areas of biostatics, genetics, punch card systems, evaluation of data and field work are identified with the project. The Commonwealth Fund furnished financing and publication facilities. After a critical analysis of previous, similar studies the author exposes in detail material, methods, personnel and choice of the investigated cancer and control probands. This consisted of 201 women suffering from cancer of the cervix and uterus and 215 control probands and their relatives to the total of 6,445 individuals. The book is full of statistical tables with an immediate discussion of the justifiable inferences and then an overall summary that is brief but enlightening. An appendix of twenty-five pages affords details of the questionnaires used and bibliography of this highly controversible subject.

Briefly, the author offers conclusions: (1) that heredity factory affect the frequency with which cancer appears in the uterus; (2) that the proportion of cases of uterine cancer are significantly higher in the cancer family groups, (3) that mothers and aunts of cancer probands had cancer in this same site in 3.2 per cent but the control probands had only a 1.4 per cent finding. The author insists that this difference is significant although the quantative effect of heredity (as measured here) is small. Those who are deeply interested in this subject must read the statistical studies in detail and be able to recognize the signifcance of the minimal percentages of probability and possibility.

Two additional conclusions offer both comfort and a measure of uncertainty: (1) The present study indicates that the factors which predispose to uterine cancer do not predispose in any significant degree to cancer in other sites and (2) that this study indicates that hereditary factors, other than those concerned with uterine cancer, play a role in the etiology of cancer elsewhere in the body. The statistics behind these last conclusions show that in the 2,973 mothers of noncancerous daughters that 265 or 9 per cent had cancer in some site while of 110 mothers of daughters with cancer irrespective of site nineteen or 17 per cent had cancer in some site. The reviewer warns that statistical studies of this kind and under such austere supervision and analysis can have far more influence than the small numbers of cancerous and control probands might warrant. Yet, when one realizes that thousands of relatives with the necessity of personal interviews and voluminous correspondence to search and prove the records one must congratulate the author and his assistants for the conservative tenor of their estimations and conclusions. The obvious element that limits the estimations of hereditary factors in human beings is that men and women do not breed or suffer supervision of their lives with the simplicity or rapidity of mice.

E. H. S.

Ophthalmic Pathology. An Atlas and Textbook, by Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, W. C. and Ella U. Owens. With the editorial assistance of Helen Knight Steward. Published under the joint sponsorship of the American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. Philadelphia. W. B. Saunders Company. 1952. Price $18.00.

The "Atlas and Textbook of Ophthalmic Pathology" is an outgrowth of the "Atlas of Ophthalmic Pathology" by DeCoursey and Ash, which was based on material in the Registry of Ophthalmic Pathology, produced by the Army Medical Museum and sponsored by the American Academy of Ophthalmology and Otoloryngology. Its preparation was instigated by the educational committees of the Academy. The aim of these committees was to provide a text embodying the requirements in histopathology for board certification, to further the instruction of residents and to furnish a convenient source for the ophthalmologist pursuing study in the pathology of his specialty.

This text presents a clear and comprehensive coverage of the morphologic pathology of the eye and an exposition of the physiologic processes that pertain to ocular change, written by outstanding investigators in the field of ophthalmology, and represents the most advanced thought on the pathologic considerations of this field and furnishes a good foundation for the interpretation of clinical manifestations of ocular disease. It is ideal for both the student and practitioner.

The Registry of Ophthalmic Pathology is the oldest component of the American Registry of Pathology. The contribution of specimens and records by ophthalmologists over a period of thitry years has built up an outstanding collection of material in this Registry.

J. R. R.

SYNOPSIS OF GENITOURINARY DISEASES, by Austin I. Dodson, M.D., Richmond, Virginia, Professor of Genitourinary Surgery, Medical College of Virginia; Genitourinary Surgeon to the Hospital Division, Medical College of Virginia; and Donald L. Gilbert, M.D., Instructor in Urology, Medical College of Virginia. Fifth Edition. St. Louis. The C. V. Mosby Company, 1952. Price $4.00.

This little volume presents an extensive survey of its subject, systematically and concisely written, with its main emphasis on the more common lesions and a quick mention of the more rare conditions. That the present edition is the fifth is evidence of the wide acceptance of this work which was originally published in 1934.

The anatomy of the urogenital tract is briefly reviewed; anomalies are discussed at greater length and illustrated extensively with photographs, x-rays and lucid diagrams.

A discussion of internal medications is as up-to-date as possible on the uses of antibiotics and does not omit mention of agents of proven worth antedating the "wonder drugs."

Infections are discussed, organ by organ, with reference to their etiology, pathology, symptoms, diagnosis and treatment. Of particular interest is a brief résumé of the travails of early investigators in venereology in establishing gonorrhea and syphilis as separate diseases, in spite of the efforts of some to prove the contrary by self-inoculation of rather heroic order.

Tuberculosis of the genitourinary system is well outlined and illustrated, but some of the more recent medical aids to treatment had not been available soon enough to be included in the improving picture of treatment of this disease.

Injuries are considered organ by organ with emphasis on the need for their recognition and on the possibly urgent nature of surgical treatment and repair.

The importance of a preceding morbid process in the kidney in stone formation is stressed and the roles of infection, diet, metabolic disorders and urinary obstruction are evaluated briefly.

Prostatism and its management is a topic loaded with controversial material, so it is only natural that not everything in this chapter would be accepted by all urologists.

The discussion of tumors is fairly extensive and here again the illustrations are forceful.

All in all there are many quick aids to proper diagnosis and treatment and a good brief review of genitourinary diseases.

C. L. J.

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From where I sit
***by* Joe Marsh**

The Missus Keeps Posted

Ever since our electricity was cut off last year on account of me forgetting to mail in the payment, the Missus has been sort of leery about giving me letters to mail.

First, she'd ask if I mailed them, then double-check my coat at night. Then she stopped—and I figured she was sure I'd learned my lesson.

Then yesterday, I got a postcard at the office—from the Missus herself! It read: "Thanks, Joe, for mailing my letters." Well! Looks like she figured I *still* needed some checking-up and slipped that postcard in the last batch of letters.

From where I sit, an occasional check-up is a good thing. Like a check-up on our tolerance, for instance. I promise not to tell you what beverage to drink or how to practice your profession. Now I like a glass of beer with supper, you may prefer tea—but if I try to switch you to my choice, please "address" me with a reminder of your rights.

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William B. McCunniff, M.D.

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Guest Editorial

The Challenge and Rewards of Industrial Medical Practice

Edward C. Holmblad, M.D., *Managing Director, Industrial Medical Association, Chicago*

When most of us attended medical school, we did not have the opportunity to learn anything about this special field of practice. Nowadays, medical students, interns and residents all have some contact with the practice of occupational medicine.

The overall challenge is the opportunity to keep all industrial workers in the best possible physical and mental condition. To do this it is important that such optimum health be maintained not only during the working hours but also at all times while the worker is at home, during recreational periods and even during vacations. With such a broad and comprehensive objective it is easy to understand that this field of medical practice is the source of the greatest variety of medical problems. This constant variation in presenting medical problems requires that the industrial physician keep himself informed of the current advances in all branches of medicine. This not only includes advances in diagnostic procedure but also in treatment, in prognosis and in health evaluation procedures.

Edward C. Holmblad, M.D.

It is most important that, when an employee returns from an absence due to illness or accident, the industrial physician knows how to evaluate his condition, see that he is properly placed in his work and gets the necessary medical supervision to effect complete rehabilitation. Such cases may present problems in every field of medicine. There may be serious automobile accidents with all kinds of fractures and trauma, operations for everything from brain tumors to varicose veins, returning veterans with malaria, infectious hepatitis or neuropsychiatric disorders. Yes, the industrial physician also has such problems as returning employees who have been treated for pulmonary tuberculosis and in whom this disease has been arrested. The responsibility, tact and diplomacy in returning an employee to work who has been a patient in a mental institution with shock treatment may require the greatest sympathetic understanding as well as the ability to guide his return and acceptance by fellow workers. It is easy to understand why the industrial physician may not know what problems will face him as he starts each day which is almost always full of adventure and new situations. Even such routine procedures as preplacement examinations may require decision as to employability and proper placement of the applicant who has had an intervertebral disk operation or a pneumonectomy or a nephrectomy.

Another challenge is the opportunity to examine and detect disease among employees in its early stages. X-rays, serology, sedimentation rate tests, blood counts, urinalyses and blood chemistry are some of the aids in recognizing disease early. The challenge of evaluating cardiac conditions and symptoms in connection with a possible coronary episode remains a match for our best clinicians.

Still another challenge is that of stimulating, guiding and directing health education, not only among the employees but also to their families. Many industrial physicians write articles for the plant employees' magazine or publications. Such subjects as health hints for vacations, value of tuberculosis chest x-ray surveys, value of early physician treatment of colds and bronchitis, are all helping to put across the value of health to our people.

Yet another opportunity for the industrial physician is to organize his work and his medical department so that he can confer and counsel with management and indicate the significance and value of the medical services that are rendered.

Now then, let's discuss some of the rewards of an industrial medical practice. One of the leading rewards is that the industrial physician has a complete, up-to-date work shop, with adequate

(Continued on page 184)

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Neo-Synephrine®
hydrochloride

Running noses, sneezing, watery eyes, clogged-up nasal passages quickly yield to administration of Neo-Synephrine hydrochloride — a nasal decongestant of proved clinical value. Ciliary activity is nearly untouched, sting and congestive rebound are practically absent, and effectiveness is undiminished on repeated use throughout the cold season.

Neo-Synephrine HCl

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- 0.25% Spray (unbreakable plastic squeeze bottle)
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Neo-Synephrine, trademark reg. U.S. Pat. Off.,
brand of phenylephrine

Missouri Academy of General Practice

William J. Shaw, M.D.

The Chariton-Macon-Monroe-Randolph County Medical Society has practiced for five years the type of public relations A.M.A. President Edward J. McCormick referred to in St. Louis, December 1, when he said, "I have come to the conclusion that bad public relations is a grass roots problem and cannot be solved at the national level."

In 1948, members of this Central Missouri hyphenated society decided to devote one meeting each year to a dinner, with lay or professional friends as guests, to hear an outstanding speaker on a topic of general interest. These meetings have become excellent media for good public relations. The fifth annual dinner was held December 10, with Dr. Roscoe L. Pullen, dean of the University School of Medicine, addressing approximately 100 doctors, wives and friends.

Dr. Pullen discussed medical education progress in Missouri and some of the problems confronting the medical profession in the state. He called attention to the vast change in the practice of medicine in the last few years and the need for the University to hear from private practitioners the type of instruction that medical students should be given, quoting statistics to bear out the contention that the new Missouri school must produce general practitioners. The intense interest manifested by the mixed audience and the applause accorded the speaker demonstrated not only acceptance of the Dean's plans but the degree to which the lay audience was interested in the future of medicine and the new medical school.

Dr. F. L. Harms, general practitioner from Salisbury, retiring president of the Society, introduced the incoming president, general practitioner James Campbell, Macon; the vice president, general practitioner George M. Ragsdale, Paris; and general practitioners L. E. Huber, Moberly, and C. C. Weger, Keytesville, censors respectively for Randolph and Chariton counties. Dr. W. Deward Chute, Moberly, succeeded general practitioner C. C. Cohrs, Moberly, as secretary-treasurer. Included in the large and interested audience, in addition to Moberly physicians, were general practitioners W. S. Petty, D. E. Eggleston, J. E. Campbell, Edward Johnson, Macon; G. E. Ragsdale, Paris; Leopold LaChance, Centralia; P. V. Dreyer, Huntsville; and F. L. Harms and G. W. Hawkins, Salisbury.

President McCormick and others concerned with the medical profession's loss of stature in recent years would have been gratified by the rapport shown in this excellent "grass roots" public relations meeting.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

After readin' about thirty pages of the December 26 Union Publication, I might squander an opinion that the hundred and seventy-seven delegates registered in at the House of Delegates were busier than a cat on a tin roof. They sure had a lot of big questions to ponder over. Some of 'em probably wished they had stayed at home.

F'rinstance the president said in his message "I hope every physician who reads this page will make it his business to familiarize himself with the details." Now he was just being nice. What he shoulda said was every physician had durn well better make it his business to read 'em because he ain't doing justice to his union if he don't know what's goin' on!

Now we can't all be members of the House of Delegates—not near enough of us even would like to be. But all of us can be a big help to our representative if we jest take a few minutes to know what's goin' on and then let him know thru official channels, what we think oughta be done. If more members do this they'd have nary a reason to get so noticeably vexed over the decisions that have been made.

Yep, Uncle Teddy, when anybody sez, "Why don't the AMA do this or that" I wonder if they shouldn't be askin' "Why don't I do this or that?" He's plum forgot that he is the AMA and the AMA is his Union. If he don't like what's goin' on then it's past time fer him to wake up and get in there and pitch. Like the old sayin' goes "the woods would be mighty quiet if only the best birds sung."

Yer ponderin' nephew,
Pete

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ALUMINUM HYDROXIDE GEL

AMPHOJEL helps patients sleep by neutralizing acid promptly . . . promoting pain relief through the night. A double dose at bedtime will effectively control "night pain" in most patients.

AMPHOJEL is a double gel—one *reactive*, for immediate buffering of gastric acid; the other, *demulcent*, for prolonged coating of the gastric mucosa—protection for the granulation tissue in the ulcer crater.

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Available: Suspension: Bottles of 12 fl. oz.
Tablets: Boxes of 30 (5 gr.), bottles of 100
Boxes of 60 (10 gr.)

What Is Your Hobby Doctor?

Old English Silver

When we approached colleague, C. Stewart Gillmor, M.D., Kansas City, concerning a write-up on his hobby, a rare silver collection, he was hesitant, and referred us to his wife, Evelyn (well-known in the Missouri State Auxiliary activities). This razzle-dazzle was completed, however, when she, in turn, assured us that Stewart is the real authority in the family.

Tea urn made in London in 1775 by Charles Wright being shown by Dr. and Mrs. Gillmor.

It seems that Dr. Gillmor's interest in collecting rare antiques of English silver was first stimulated while he was in service. During the last several years the Gillmors have acquired almost eighty valuable pieces bearing the mark of Hester Bateman, the most famous woman silversmith during the latter half of the eighteenth century.

In addition, the Gillmor collection includes items of other famous silversmiths such as Matthew Boulton, Paul Storr, Robert Hennell, John Spackman and Samuel Courtauld.

There are about one hundred fifty separate items in the entire collection. These range from rather ornate cake baskets, an impressive Matthew Boulton *epergne* of silver and a Waterford glass, to dainty spoons and salt cellars. However, according to the experts, the Bateman collection is their finest exhibit.

The study of antique silversmiths and their wares has led Dr. and Mrs. Gillmor in their trips abroad and in this country to search out many of the unique shops and several of their friends in England, particularly, are on a constant watch for rare articles.

The oldest piece in the Gillmor collection is a 1694 sugar-shaker, in a light-house design, by John Spackman. However, the Gillmors still hope, above all, sometime to obtain a specimen of the work by Paul de Lamerie, considered probably the finest craftsman during the first half of the eighteenth century.

Like others whose hobbies we have presented on this page, Dr. Gillmor does not consider this fascinating collection merely as a hobby; he claims it has an investment potential as well.

Nevertheless, when he speaks of his collection, there is a certain gleam in his eye which would indicate a deeper concern and interest, a pride not measurable in dollars and cents value, as one would ordinarily speak of investments. We doubt that Stewart will ever test the accuracy of his statement concerning the "investment" attributes of this beautiful array of old English silver.

(We will appreciate hearing from other members with interesting or unusual hobbies. V.T.W.)

Capsule Clinics

IRVING A. WIEN, M.D.

- Physical and material efficiency is not everything. By accepting the contributions of old age to human dignity and human wisdom, we will remove the curse which makes an important and prolonged part of our life span, a dreaded dark corner of misery. Gumpert, M.: Bull. Meninger Clin. **17** (May) 1953.

- Retroflexion and retroversion are painless with a small uterus and no complicating factors. Symptoms may be a sense of pelvic heaviness, pressure on the rectum with constipation, and painful menstral periods because of pelvic engorgement, frequency and dysuria. Malten, E.: Am. Practitioner **4** (August) 1953.

- Alcholism is an illness usually having a psychopathological background. Masters, H. R.: South. M. J. **46** (May) 1953.

- The number of persons who are being treated for hoarseness is infinitesimal compared to the number of people who need treatment. Boland, J. L.: J. Oklahoma M. A. **46** (May) 1953.

a good "mixer"

for your cough prescriptions

especially valuable when allergic factor
is suspected or present

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COUNCIL ON PHARMACY AND CHEMISTRY
AMERICAN MEDICAL ASSOCIATION

Chlor-Trimeton syrup q.s. ad

- taste appeals to young and old
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Contains CHLOR-*TRIMETON*® Maleate
(brand of chlorprophenpyridamine maleate), 2 mg. per teaspoonful (4 cc.).

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SCHERING

Our Auxiliary

Mrs. C. Alex (Helen) McBurney, *President*

Congratulations to our newly organized Auxiliary to the West Central Counties Medical Society (Bates-Cass-Cedar-St. Clair-Vernon), organized at Nevada, December 10, 1953. The following officers were elected: Mrs. O. B. Barger, president, Harrisonville (Cass County); Mrs. James J. Pascoe, vice-president, Nevada (Vernon County); and Mrs. Carter W. Luter, secretary-treasurer, Butler (Bates County).

The 1953-54 Auxiliary year is drawing to a close and your president would like to take this opportunity to thank the following for their cooperation, advice and counsel, without which our aims and accomplishments could not have been realized: Dr. E. C. Bohrer, Dr. H. E. Peterson, Dr. Victor B. Buhler, Dr. Harry M. Gilkey, Dr. Jean J. Merz, Dr. Vincent T. Williams, Dr. W. S. Sewell, members of the Council to the Missouri State Medical Association, Miss Helen Penn, Mr. T. R. O'Brien, Mr. Ray McIntyre, Mr. Lemoine Skinner, the Honorable James T. Blair, Jr., Lieutenant-Governor, and the members of the state board of the Woman's Auxiliary.

Attention, wives of physicians attending the state convention of the Missouri State Medical Association, you are invited to attend the Auxiliary meetings and social functions at the Statler Hotel in St. Louis, April 4 to 6, 1954. Mrs. A. B. Jones, president of the St. Louis City Auxiliary has issued us a cordial invitation and Mrs. Martin Glaser, State Convention Chairman, and her committees are busy making plans for an interesting meeting. The registration at 1:30 p.m. and the preconvention board meeting at 2:30 p.m. will be on Sunday, followed by a buffet supper planned for you and your husbands (remember the good one in Kansas City last year?). Come and help us make this one a success too.

The general meetings are on Monday and Tuesday and are followed by a luncheon and program. The past presidents are honored at the luncheon on Monday and Mrs. Leo J. Schaefer and Mrs. George D. Feldner, presidents of the auxiliaries to the A.M.A. and S.M.A. respectively, will be guests of honor at the luncheon on Tuesday.

Dr. Franklin D. Murphy, Chancellor of Kansas University, will be the guest speaker at the luncheon on Tuesday. Dr. Murphy was chosen by President Dwight Eisenhower to represent the U. S. at the conference of "The World Health Organization" last April in Europe. He was a guest speaker at the Conference of Presidents and Presidents-Elect in Chicago last November. Read your *Quarterly Bulletin* for the complete program.

Others Say

(Mostly from Missourians)

To the New Team . . .

. . . It is necessary and our privilege that the Medical Profession continue a united front to further its high ideals. Without this unity we are more vulnerable. I hope that we can in the future as the past, take stands that we can all be proud of. The Science of Medicine has made miraculous advancements in recent years, and it is my faith that it will abide by the Philosophy laid down by Hippocrates in utilizing these scientific developments.

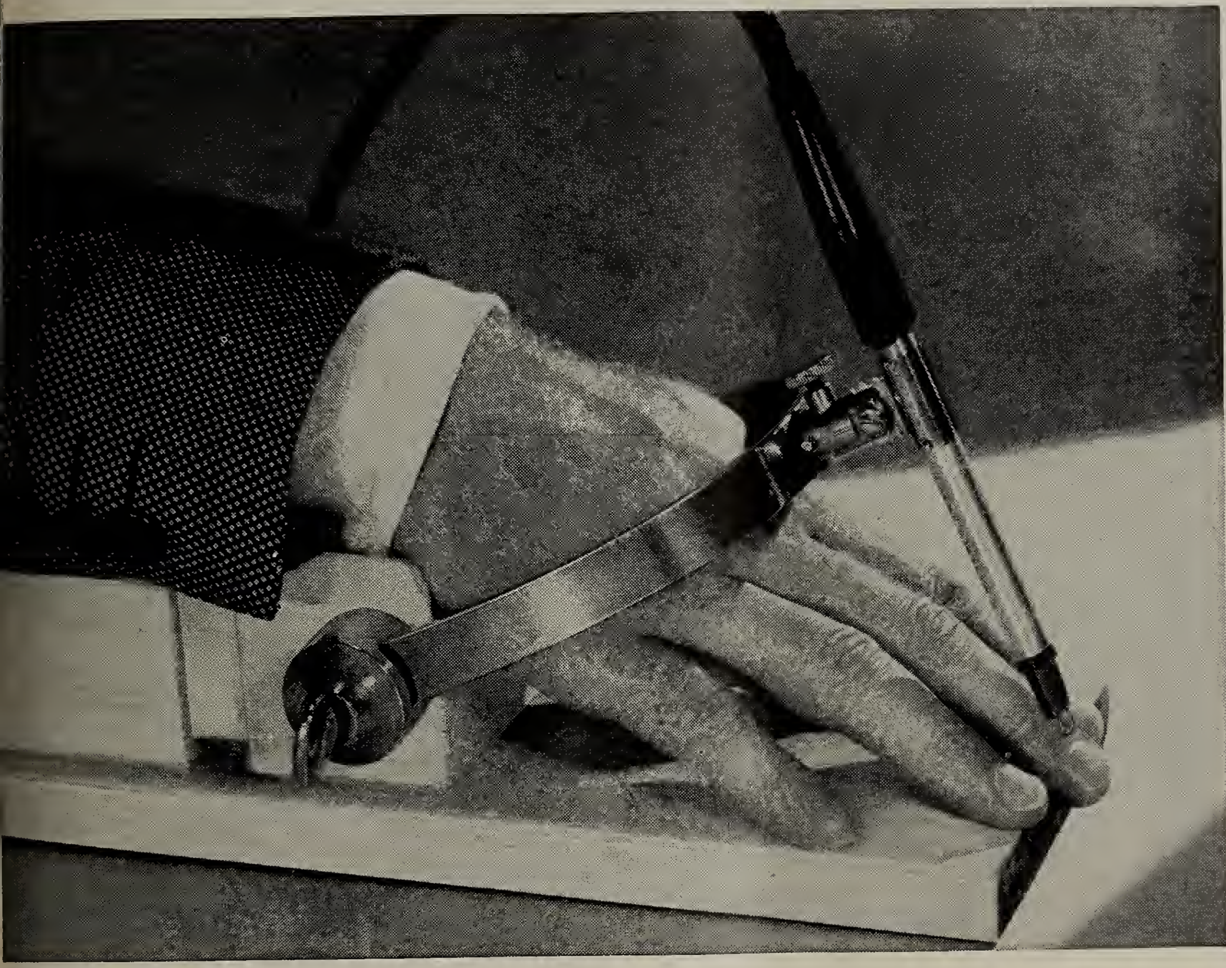
I have faith that this same progressive spirit and cooperation will continue in our organization with your new president . . . and his elected and appointed officers.—W. J. Marshall, M.D., "Annual Report of the President," *Bulletin of the Greene County Medical Society.*

A Time for Soul-Searching

As we enter into a new year, perhaps we should review the purposes of county medical societies and see if we are individually and collectively doing our best to carry out such purposes.

Surely our organization is intended for higher purpose than that of assuring us of greater income for less work. It should be a means of making for exchange of ideas, dissemination of information as to new thoughts in diagnosis and treatment, discussion of ways to provide better medical service for a greater number of people including the indigent, making plans for improving the health of the community, and promoting other ideals of our profession.—Allen I. Herman, M.D., Editorial, *Buchanan County Medical Bulletin.*

Physiological test compares **Kent**'s "Micronite" Filter with other cigarette filters



"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

To compare the efficiency of various filters as they affect physiological responses in the cigarette smoker, drop in surface skin temperature at the last phalanx was measured.

Using well-established procedures, the subject smoked conventional filter cigarettes and the new KENT with the exclusive Micronite Filter.

For every other filter cigarette, the drop in temperature averaged over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

These findings confirm the results of other scientific measurements that show these facts: 1) KENT's Micronite Filter takes out *far more* nicotine and tars than any other cigarette, *old or new*. 2) Ordinary cotton, cellulose or crepe paper filters remove a small but ineffective amount of nicotine and tars.

Thus KENT, with the first filter that really works, gives the one smoker out of every three who is susceptible to nicotine and tars the protection he needs . . . while offering the satisfaction he expects of fine tobacco.

For these reasons, smokers have made the new KENT the most popular new brand of cigarette to be introduced in the last 20 years.

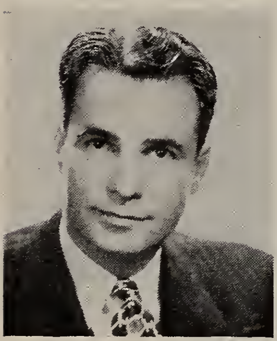
If you have yet to try the new KENT with the exclusive Micronite Filter, may we suggest you do so soon?

TWENTY
KENT
CIGARETTES
WITH THE MICRONITE FILTER
KENT

Missouri Medicine in Review

Leo H. Pollock, M.D.

MARCH, 1914



The double cross which, for about ten years, has been used by antituberculosis societies and institutions as a symbol or emblem of their fight, was first formally adopted by the International Antituberculosis Association in Berlin in 1902, when it was proposed by Dr. C. Serseron of Paris. He took the shape of the cross from the common Croix de Lorraine and the cross of the Greek Catholic Church.

The sales of heroin have recently increased greatly, particularly in those states which have rigid laws preventing the indiscriminate sale of morphine and cocaine. Heroin is frequently found as a constituent of a number of proprietary drugs.

The January 1914 issue of the state journal has an excellent paper entitled "Luke, the Greek Physician," a study of the effect of contact between Greek science and Christian faith in a human mind.

It is estimated that in a city like Chicago $15,000,000 are burned annually at the illicit shrine of Venus, and that Kansas City's citizenship each year prostitute to their baser passions $2,000,000.

MARCH, 1929

Dr. Oliver Kamm, of Parke, Davis and Company, reports the isolation of two hormones from the posterior lobe of the pituitary gland. Dr. Kamm was awarded the $1,000.00 prize for the "most noteworthy contribution to science." The two hormones isolated are named alpha and beta (commercially pitocin and pitressin respectively), said to be the first time that any one has demonstrated that one gland might contain more than one hormone.

Dr. Duff Allen, of Washington University, has prepared motion pictures of a heart operation which he performed with the aid of the cardioscope in 1924 and was the third successful heart operation of the type in medical history. It was the slitting of tissue uniting the mitral valves.

At the annual meeting of the State Board of Health held in Jefferson City, Wednesday, January 2, 1929, Dr. H. L. Kerr, Crane, was elected president to succeed Dr. W. A. Clark, Jefferson City. Dr. H. S. Gove, Linn, was elected vice president. Dr. James Stewart, Jefferson City, was reelected secretary and state health commissioner.

MARCH, 1944

Lt. Col. Edward H. Hashinger, Kansas City, recently returned from North Africa where he was the medical director of the 77th Evacuation Hospital Unit.

The new journal, *Soviet-American Medicine,* is worth the subscription price just to know that all those Russian hieroglyphics can be translated into good medicine. The only trouble with Soviet medical men is their repeated accomplishment of the foolhardy, illogical and impossible. Witness blood from cadavers and such.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

A woman patient of mine, recovering from a 105 F. temperature from a blood transfusion reaction, remarked, "That certainly was hot blood you gave me. Could I get some for my husband?"

I have always been intrigued by this little ditty:

There's nothing much to life but this
A pleasant smile, a woman's kiss
A drink, a smoke, a book, a friend
And just a little cash to spend.

Nowadays it's difficult even to get enjoyment of such simple pleasures what with pasteurized beer, filtered cigarettes, won't rub off lipstick and chlorophyll added to everything.

A note in the mail this morning: "Dear Doc, will you please send me two bottles of piles as I am out now."

A patient just called and asked that I give her a new prescription as the druggist would not refill the old one because it had a neurotic in it.

My 5 year old just came in and announced she had a bad case of "brown-chitis."

"...when the patient is in acute distress from waterlogging..."

"Meralluride sodium solution (MERCUHYDRIN) in 1 to 2 cc. doses intramuscularly has been very effective and is not painful."* In acute congestive failure, MERCUHYDRIN characteristically curbs tissue inundation and relieves dyspnea, orthopnea and cardiac asthma.

Ampuls of 1 cc., 2 cc., and 10 cc. vials.

*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

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(meralluride injection U.S.P.)

Leadership in diuretic research
Lakeside LABORATORIES, INC., MILWAUKEE 1, WISCONSIN

A Message From H. E. Petersen, M. D.

President-Elect of the Missouri State Medical Association

This is a tribute to a great doctor—great because, in the more than thirty years before his death on January 20, E. Claude Bohrer practiced medicine in the finest tradition of our profession.

Born in Olden, Missouri, in 1892, Dr. Bohrer became interested in medical care as a young man by assisting his father, a pharmacist. After graduating from the Kansas City College of Pharmacy in 1913, he practiced pharmacy for several years before entering the University of Missouri from which he received his A.B. degree and a two year certificate in medicine in 1920. In 1922, he received his M.D. from Washington University and entered internship at St. Louis City Hospital. The following year, Dr. Bohrer went into the general practice of medicine in West Plains. He served his community both as a physician and a participant in civic activities from that time until he discontinued his practice about four months before his death.

My personal acquaintance with Dr. Bohrer dates back a good many years. I knew him as a friend, and, just as everyone who knew him, I admired him. I admired his quiet, unassuming manner. I admired his deep feeling about the profession to which he devoted his life.

I knew Dr. Bohrer, who served as a Councilor of the Association from 1938 until he was named President-Elect in 1952, as a fellow worker in MSMA. Foremost in his mind at all times was the single aim of providing the people of Missouri with the best possible medical and health care.

I knew him as a leader—as President of his Association—and I face with the deepest sense of responsibility the job of continuing the forward-looking program he set out at last year's Annual Meeting. To the man named to complete the remaining months of Dr. Bohrer's term of office, I wish the greatest success. He and every member have my pledge that, in my term of office beginning this April, I shall do all I can to see to it that the Association comes another step closer to achieving the important broad objectives Dr. Bohrer outlined when he took office.

In concluding these brief and inadequate comments, I should like to recall Dr. Bohrer's own personal assessment of the kind of life he led and the kind of medicine he practiced. Speaking last September to a group of physicians, he said:

"In addition to the important opportunity for a service that measures up to the highest ideals of our profession, the small community provides a way of living that stands in sharp contrast with the intense activity of the city. . . . The small town will give the able and conscientious doctor all that he could desire for himself and his family.

"It will give much more. It will give him close and lasting friendships. It will give him, if he deserves it, a place of honor in civic affairs. In short, it will give him a good life and a life rich in service to the people, his traditional first responsibility."

Guest Editorial

(Continued from page 174)

facilities, equipment and assistants to do an outstanding job in rendering a comprehensive plant medical service. He has the time to follow through on a case and does not have to defer suggested procedures either because he lacks the time or because the patient cannot afford to have those procedures done. If he wants an x-ray of the chest, an electrocardiograph or a basal metabolism test, he simply orders it done. This gives real satisfaction in practicing medicine. Along with this is the privilege of having the best consultations in order to arrive at a correct diagnosis or guidance on further treatment. The fact that our best recognized clinics, our outstanding professors, medical leaders and specialists seek and welcome consultations on industrial cases attests further to the satisfaction and desirability of industrial practice.

Another satisfaction is that industrial practice eliminates all money matter problems with the patient. There are never any arguments about your bill, slow paying, delinquent or uncollectible accounts. When industrial medicine is practiced properly there are no credit losses. All your income is net.

There are other compensations, such as practically no night calls, regular hours, Saturdays, Sundays and holidays at home with your family. It is possible for industrial physicians to attend postgraduate courses and medical conventions because it is important that they keep abreast of all medical advancements. The fact that you can plan adequate vacation periods, hunting and fishing trips, regular golf or skeet shooting dates, is one of the additional benefits.

It matters not whether you start your industrial practice on an on-call basis, developing it into part time at the plant and later into a full time medical director position, there are always adequate challenges and rewards. The rapid growth of this specialty further indicates that industrial medicine is a desirable, pleasant and satisfying type of practice.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 March, 1954 Number 3

Pruritus Vulvae

WILLIAM H. VOGT, JR., M.D., *St. Louis*

Pruritus vulvae may perhaps best be considered as a symptom made unusually complex by its varied causes, manifestations and therapies. It is simply not possible to ascribe to pruritus a single cause for a single sign with a single measure that promptly relieves and ultimately cures the patient. On the contrary, pruritus may have several causes, several stages of progression and even regression, and many agents have been used for its relief. It is a nonspecific symptom complex that may be produced by two or more factors.

CAUSES

Pruritus is usually caused by one or more of the following:

I. *Vaginal Discharge:*

1. Trichomonas.
2. Monilia.
3. Cervicitis:
    (a) Erosion.
    (b) Endocervicitis.
4. Foreign bodies:
    (a) Pessaries.
    (b) Retained tampons.
5. Gonorrhea.
6. Senile changes.

II. *Local Diseases of the Vulva:*

1. Intertrigo.
2. Eczema.
3. Kraurosis.
4. Leukoplakia.

III. *General Toxic Conditions:*

1. Diabetes mellitus.
2. Pregnancy.

IV. *Psychoneurosis:*

1. Unsatisfactory sexual adjustment.
2. Psychosomatic features:
    (a) Masturbatory elements.
    (b) Masochistic elements.

Obviously, when one is confronted with a list of etiologic factors as imposing as these, it must follow that in the individual case there may well be different pathologic features and entirely differing therapeutic needs. It is sometimes necessary to treat only the causative agents and thereby to eradicate the condition and relieve the symptoms. Such is the case in pruritus due to Trichomonas Vaginalis vaginitis, mycoses, cervicitis, the vaginitis of advanced years or that following surgical castration in the reproductive years, eczema and kraurosis. In the cases of pruritus due to pregnancy alone, those due to diabetes and those in the psychogenic group, it is not always sufficient to employ a single measure directed at a single feature in order to relieve the symptom. For example, in pruritus associated with diabetes, there is quite often the additional feature of a monilia infestation of the vagina. Yet the successful treatment of the monilia and the careful medical control of the diabetes may still prove unavailing in correcting the itching. In the itching of pregnancy, psychosomatic factors may play a large role along with pathologic vaginal discharges that so often arise in the pregnant state. Finally, there is a rather imposing group of patients, in my experience about 50 per cent of all case, in whom the psychoneuroses must be invoked as sole causes of itching. The psychiatrist would explain these cases along the following lines: That there is a psychomatic factor in at least 90 per cent of cases; that itching leads to scratching and in certain instances there results a sensuous, pleasant sensation at times culminating in orgasm, while in other instances the scratching may be so vigorous as to almost denude the perineum and vulva of skin. In the first group, there is the masturbatory element, whereas in the second there is a masochistic element.[1]

Presented at a regional meeting of the American Academy of Obstetrics, Little Rock, Arkansas, June 27, 1953.

From the Department of Obstetrics and Gynecology of the St. Louis University School of Medicine.

TREATMENT

Treatment of a large number of cases of pruritus is entirely definitive since agents used for relief of the symptom are primarily directed at a specific underlying cause. The attack and successful eradication of the trichomonas by such measures as vaginal acidification plus the use of trichomonacides will ordinarily not only clear the infestation but relieve the itching as well. In monilia infestations associated with pruritus, applications of gentian violet without direct treatment of the external genitals will often be sufficient to completely relieve the patient. Also, in cases of pruritus attributable to erosions or endocervical inflammations, the simple cauterization of the cervix will most often clear up the discharge and relieve the itching. The use of estrone suppositories in senile vaginal inflammations, of penicillin in gonorrhea and the simple removal of irritating foreign bodies followed by one or two cleansing douches will satisfactorily take care of pruritus associated with these types of cases.

It it the pruritus with no specific, identifiable cause with which one must be most concerned and it is in these women that the psychogenic factors play so important a role. Here one encounters the patients who have gone from general practitioner to dermatologist, to radiologist, to gynecologist, to surgeon, in about that order. Here one may find treatments of all types. Reported in the literature of the last ten years are cases treated with x-ray, crude tar, antihistamines, fatty acids, alcohol injections, vulvectomies and all sorts of lotions, salves and local anesthetic ointments. One author[2] indicates that 90 per cent of cases have an underlying psychic basis, whereas another[1] reports some 1,400 cases due to vaginal cervical infections without a single case that might be classified as idiopathic. Somewhere in between these rather divergent opinions the true picture probably lies.

What may be the cause of pruritus in this latter group? Usually one finds some form of disturbed living—an unhappy marriage, illness in a beloved one, jealousy. It is interesting that in these people the itching may well continue even after the supposed cause is removed. It is perhaps even more interesting that these patients are often ashamed of their inability to control their scratching. Occasionally such an individual manifests fear, fear of malignancy, fear of venereal disease and thus hesitates to present herself for examination because of shame, fear or both.[4] It is worthy of note that the vast majority of these patients have been treated extensively before the present consultation, but the treatment has always been directed at the vulva, perineum and vagina and seldom at the true source of the trouble, the mind. Frequently, this therapy has not been efficacious and the patient has changed doctors and has even taken to treating herself, often with severely caustic agents that substitute pain for itching, at least temporarily. The damage to the skin is considerable. Finally, it is most worthy to be aware that pruritus seldom occurs in nuns, seldom in Negro women. In these people there is a deeper than usual sense of serenity.

Thus, an attempt should be made to relieve the minds of these individuals, to help in straightening out the familial problems, to aim at achieving that peace and happiness so necessary for mental as well as physical well-being. An ever more insistent demand that the patient cease scratching should be voiced again and again. Sweet[4] suggests an antipruritic ointment: 5 per cent crude coal tar, 5 per cent zinc oxide, 45 per cent starch, and 45 per cent soft paraffin. He directs that this should be applied each night. This ointment is a greenish black paste that serves to relieve the itching and at the same time sticks satisfactorily to fingers and nails, thereby serving as an indicator of whether the patient has scratched during the night. Mild sedation with phenobarbital at night helps to afford nocturnal rest and to reduce the susceptibility to itching. If x-ray has not been used up to this point by any previous consultants, three or four applications of 75 to 100 R is often helpful. Why is there need for local ointments and x-radiation if in these people the trouble largely originates in the mind? Because after long, vigorous scratching there is often thickening of the epithelium and crude tar applications and x-ray serve to give relief by decreasing local susceptibility to the itching stimuli.[3] Admittedly, the insistence on discontinuing scratching, the help in correcting marital and other familial difficulties, the assurance that the patient is not suffering from venereal disease or malignancy, and the use of sedatives are far more important than the local treatment of the parts. It is true that local antipruritic ointments do serve a real purpose.

CONCLUSIONS

1. Approximately 50 per cent of cases of pruritus vulvae are attributable to specific causative factors such as Trichomonas Vaginalis vaginitis, monilia, cervicitis.
2. The majority of such cases may be relieved satisfactorily by direct attack on the causative organism or pathologic entity.
3. At least 50 per cent of pruritus patients have an underlying psychogenic feature which makes for some difficulty in treating these women.
4. The treatment of this latter group is directed at: (a) relieving the minds of the individuals, (b) efforts to cause cessation of scratching, (c) local soothing ointments and (d) sedation.

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Nonspecific Ulcerative Colitis

Antibiotic Residues in Treatment

MARK M. MARKS, M.D., *Kansas City*

THE GROWTH STIMULATION and disease prevention capacity of antibiotic residues added to animal feed has firmly established its value in animal husbandry.

For the last two years these residues have been used also as specific medication in the treatment of scours, a violent diarrheic disease caused by Escherichia coli affecting the young of cattle, hogs, dogs and fowl. The rapidity of the therapeutic effectiveness of the residues in this disease suggested their application to comparable human ailments.

SOURCE OF MATERIAL

The sludge, remaining after the antibiotic in aqueous solution has been removed, is dried and pulverized. It contains a small amount of fat, vegetable fiber, diatomaceous earth and known quantities of antibiotics and vitamin B_{12}. Two of the powdered residues were from aureomycin and terra-streptomycin manufacture. By granulation and compression, tablets were formed weighing 0.5 grams. Each contained 19.8 milligrams of antibiotic and 19.8 micrograms of vitamin B_{12}. Dosage was arbitrarily set at four tablets before meals and at bedtime, i.e., sixteen tablets daily. Because of the distaste of the terra-streptomycin tablets, they were abandoned and all patients studied received only aureomycin residue.

CLINICAL EFFECTS

Five adults without intestinal complaint were given sixteen tablets daily in divided dosage for three weeks. All reported that within a few days the stools became soft and less formed, intestinal gas was markedly diminished, the appetite was increased and there was a sense of well being. Weight increase from four to seven pounds occurred in four of the group.

Seven women and three men with histories, roentgen, bacteriologic and proctoscopic evidence of nonspecific ulcerative colitis were given the aureomycin residue as their sole medication for periods of from one week to four months (table 1). These people were selected because of the chronicity of their disease. After two days of medication eight reported a decrease in the number of bowel movements. The feces became more solid and blood and mucus gradually diminished. Two responded more slowly. Weight gain was steady and there was hemoglobin rise in all but one. Weekly proctoscopic examination showed gradual but progressive healing and, as the hypermotility of the intestinal tract lessened, the friability of the colonic mucosa decreased. One patient who had been having four to eight stools daily became constipated after two weeks of treatment.

These patients have been under observation from six months to two years. Nine of them, except for infrequent minimal symptoms, have remained in remission despite seasonal changes, respiratory infection and emotional disturbances.

TABLE 1

NONSPECIFIC ULCERATIVE COLITIS, TREATMENT WITH AUREOMYCIN RESIDUE

Case	*Length of Treatment*	*Weight Gain*	*Hemoglobin Increase Per Cent*	*Well Being*	*Objective-Subjective Improvement*
L. W.	4 weeks	3.5 lbs.	76-90	Marked	Rapid and consistent
I. D.	2 weeks	1 lb. 6 oz.	75-80	Moderate	Became constipated
J. H.	8 weeks	4 lbs.	78-86	Marked	Rapid and consistent for six weeks
A. F.	12 weeks	10 lbs.	70-82	Marked	Slow response—hospitalized one year later
J. J.	6 weeks	2.5 lbs.	68-84	Marked	Rapid and consistent for four weeks
D. S.	4 weeks	3 lbs. 4 oz.	78-86	Marked	Rapid and consistent
P. O.	3 weeks	3 lbs.	72-85	Marked	Rapid and consistent
M. B.	4 months	8 lbs.	70-84	Marked	Improvement consistent for one month—remains quiescent
M. S.	8 weeks	4 lbs.	65-84	Moderate	Improvement consistent for one month—remains quiescent
L. W.	4 weeks	3.5 lbs.	——	Moderate	Slow response

Read before the Section on Gastroenterology and Proctology at the 102nd Annual Session of the American Medical Association, New York, June 3, 1953.

From the Section on Proctology, Department of Surgery, Menorah Medical Center, Kansas City, Missouri.

One of the series, a year after aureomycin residue treatment, was hospitalized briefly for an acute exacerbation. She has again become quiescent on the antibiotic residue.

To investigate further therapeutic action of aureomycin residue, patients with disease not associated with the gastrointestinal tract also were treated. Two people, aged 68 and 70, with osteoarthritis improved noticeably on taking the residue for three weeks. Their hemoglobin rise was 12 per cent and 15 per cent respectively. There was also greater motility with lessening of joint pain. Four elderly patients with nutritional neuropathies benefited in a similar manner on the same treatment. Myalgias, neuralgias and migraine decreased. Food tolerance became better. Appetites were improved, bowel movements became more normal and intestinal flatulence was markedly reduced.

These responses to the residue material warranted trial upon ten patients with spastic constipation. Macrocytic anemia was present in six. The tablets were taken for periods of two to four weeks. Clinical improvement as to appetite, weight gain, greater ease of bowel movement, hemoglobin increase, and sense of physical well being were again demonstrated in each. In the majority of patients the effects of the medication were felt within days. The others reacted also, but not as rapidly.

The work of Wetzel[1] and Wilde[2] reports the beneficial effect of cyanocobalamine or vitamin B_{12} on the rate of growth of children. An opportunity was offered to study the action of aureomycin residue on seven children with growth failure. The antibiotic powder was incorporated in flavored syrup which was then added to their milk. Here, too, there was an increased appetite evident after the second day of treatment. Five of the group averaged one and one half pounds weight gain each week during the month of trial. In some the sense of well being was reflected in better deportment and improved scholastic effort.

DISCUSSION

The role of vitamin B_{12} is known to be highly useful in the treatment of macrocytic anemias. Finch[3] reports this positive response in a variety of illnesses. The therapeutic effects observed in osteoarthritis and nutritional neuropathies in elderly people and in spastic constipation may be explained on the basis of improved nutrition due to the increased intake of vitamin B_{12}.

Since proctitis or diarrhea did not result from the long use of the residue, it seems that the quantity of the antibiotic is insufficient to produce more than a temporary reduction in the number of coliform organisms.

Other effects of such small dosage are not fully known. The nutritional content of the tablets is of minor value. There remains approximately 300 micrograms of vitamin B_{12} as a daily dose. This may be the prime factor in promoting the beneficial clinical effects.

In colitis, the residue, as a nutritional supplement seems to be able to arrest, in some degree, the catabolic course of certain enteric diseases in man as in other animals. Its ability to stimulate erythropoesis and aid in maintaining nutritional balance may be due to one or more of its components. Further investigation and study are necessary.

CONCLUSION

Antibiotic residues were used to treat ten patients with nonspecific ulcerative colitis. Favorable results were obtained in nine cases. Other nonenteric diseases also show therapeutic responses.

332 Professional Bldg.

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For Every Privilege a Corresponding Duty

. . . The hospital has an obligation to participate in community-wide educational programs, thereby helping to maintain a high level of health. And if it makes private, ambulatory, laboratory service available to all physicians of the area, to homes for the aged, to convalescent homes, the standard of medical care will be raised to a respectable level. . . . The voluntary hospital should consider itself as a big business, organized to provide the best means available for the maintenance of health and the care of the sick. It differs from big business only in that its board is prompted solely by a desire to serve the community instead of its stockholders.—Samuel J. Stabins, M.D., Rochester, New York, speaking to the Board of Directors, Menorah Medical Center, Kansas City.

"Optional at Extra Cost . . ."

. . . modern windshields were made green because large areas of glass let in too much heat from the sun. . . . For purposes of night driving this windshield color becomes the worst possible selection because automobile headlight is unbalanced. Almost two-thirds of headlight energy is concentrated in the red end of the spectrum, and only one-third is in the range to which a green windshield is most transparent . . . adds to the night visual problems of color-blind persons . . . night driving visual acuity is 20/32 through colorless glass . . . 20/46 through green windshield glass . . . on resolving power . . . a pair of objects which would appear separate at 100 feet through a clear windshield, would appear single through a green windshield until the distance had decreased to 25 feet.—Paul W. Miles, M.D., St. Louis, *Archives of Ophthalmology.*

"Indigestion is charged by God with enforcing morality on the stomach."—*Hugo*

Electrocardiography

A 12-Lead as a Routine Procedure

RICHARD R. GRAYSON, M.D., *Perryville, Mo.*

In most of the current literature on electrocardiography, 12-lead electrocardiograms are presented routinely as part of the clinical investigation of patients suffering from cardiac disease. An exception to this generalization is in the instance of certain cases of arhythmias in which this many leads is superfluous. However, in spite of this common practice in the larger centers[1] it is to be noted that the obsolete 4-lead electrocardiogram apparently is still in use as a routine study in some hospitals. It is the purpose of this paper to emphasize the need for routinely taking twelve leads in most clinical situations.

DEFINITION

By twelve leads is meant the bipolar extremity leads I, II and III, the unipolar extremity leads AVR, AVL and AVF, and the unipolar precordial electrode positions V, 1-6. By routine four leads is meant the bipolar leads I, II, III and IV (Cf4).

BACKGROUND

Pruitt[1] in his analysis of the value of the electrocardiogram in clinical problems came to certain conclusions which are worth quoting verbatim: "It is the concept of a precordial lead as a means of exploring the anterior surface of the heart which is of importance. Whether this exploration is accomplished by V leads or by CR, CL or CF leads is of far less significance than that the exploration be adequate. Conceptions of adequacy vary, but minimal requirements would appear to include leads from three points on the precordium, one of which should be to the right and one to the left of the transition zone. The unipolar extremity leads find their major usefulness in the development of concepts basic in an understanding of electrocardiography."

Levine and Phillips[2] in correlating the 12-lead electrocardiogram with autopsy findings in 150 consecutive cases observed the following:

1. When the electrocardiogram pointed to the diagnosis of acute myocardial infarction, the interpretation was invariably correct. However, 25 per cent of all infarcts at autopsy had been missed on the electrocardiogram.
2. However, no case of acute or old myocardial infarction showed a normal series of electrocardiograms.
3. The electrocardiographic diagnosis of left ventricular hypertrophy was invariably substantiated at autopsy.
4. The electrocardiographic diagnosis of right ventricular hypertrophy was substantiated in all eight cases.
5. The diagnosis of acute cor pulmonale was confirmed in seven of eight patients in whom it was made by electrocardiogram.

The authors warn, however, that, since the electrocardiogram represents the composite effect of a number of factors operating simultaneously, the effect of certain changes may be obscured in the resulting tracing and thus escape detection. "Accordingly, restraint, caution, humility and sound judgment are still vital in its evaluation."

Rosenbaum[3] also cautions the clinician to be wary of overreading any electrocardiogram, regardless of the number of leads. He states, "The electrocardiogram is in its proper place in cardiac diagnosis when it is correlated with all of the other clinical and laboratory information which can be obtained in that particular patient."

Dawber et al,[4] in a study of 2,000 patients, found that the 12-lead electrocardiogram correctly classified 89.3 per cent of the clinically normal persons as normal, but correctly classified as normal 64.1 per cent of the persons judged by clinical examinations to have possible heart disease. This is understandable, nevertheless, in view of the fact that this series included cases of hypertensive cardiovascular disease and rheumatic heart disease. It is well known that many of these cases and also many patients with coronary atherosclerosis will have normal electrocardiograms.

An especially important reason for using the 12-lead electrocardiogram in clinical problems is that without this many leads, or at least most of them, the analysis and interpretation of the recording is not possible by spatial vector methods.[5, 6, 7] There are many instances in which the interpretation becomes obvious after the QRS and T vectors have been plotted and the angle between the two determined, whereas the "pattern" method of diagnosis previously emphasized by Goldberger[8,9] has often led electrocardiographers astray. This is true simply because few physicians are expert enough to memorize all of the possible patterns which may be produced by all of the possible spatial relationships between the vectors. The 12-lead electrocardiogram also eliminates in most instances the uncertainty that usually arises as to whether a given bundle branch block is right or left.

The following cases are described in some detail to illustrate the thesis of this paper, that a routine 12-lead electrocardiogram is of value in many clinical problems.

CASE REPORTS

Case 1. E. T., a 46 year old carpenter, while climbing a ladder, developed crushing precordial pain radiating down the left arm, associated with dyspnea and weakness. The pain disappeared after one hour. He continued his activities but had several recurrences of precordial pain. When seen the next morning, because of a recurrence of chest pain upon arising from bed, the patient appeared anxious but, otherwise, physical findings were not remarkable. The pulse was 78 and regular and the blood pressure was 130/80. An electrocardiogram taken in the home (fig. 1) revealed evidence of an anterior infarct and the patient accordingly was hospitalized. He was treated with anticoagulants and bed rest and the usual supportive measures. During the first two weeks of treatment, he developed frequent ventricular premature systoles and occasional runs of ventricular tachycardia. This complication was managed successfully by administration of Pronestyl. Two months after his initial attack, the patient ws working and asymptomatic.

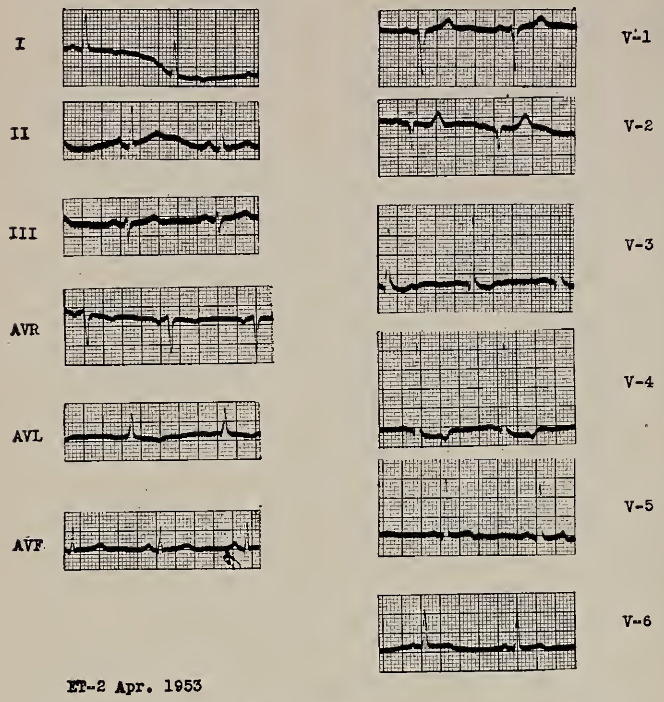

Fig. 1. (Case 1, E. T.) QRS-T angle is about 75 degrees in the frontal plane. (Abnormal.) Note biphasic T in lead I and leads V-3, 4, 5, 6. R wave is absent in V-2 and Q wave is notched. Presumptive evidence is present indicating a small anterior myocardial infarction.

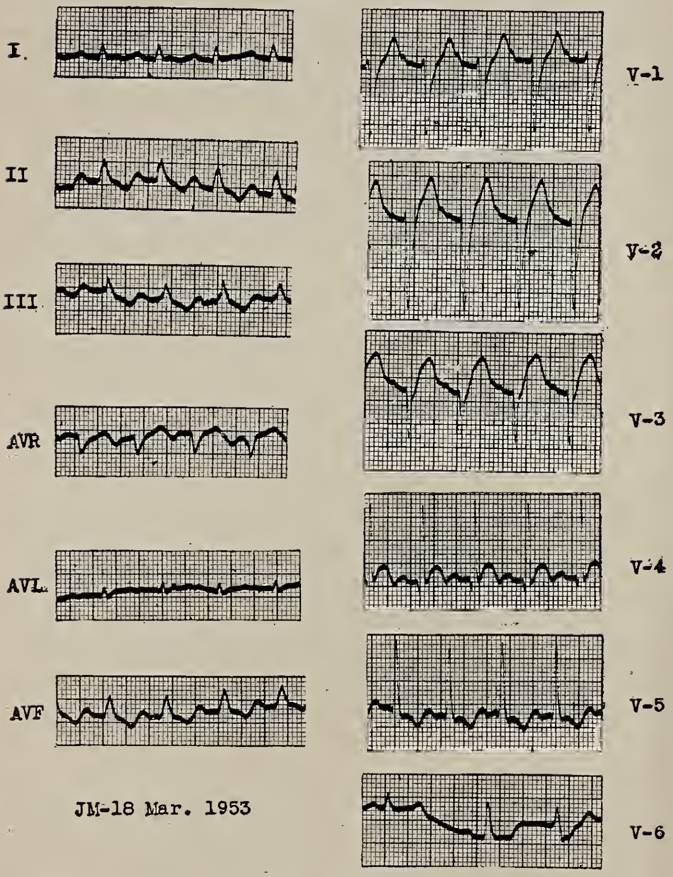

Fig. 2. (Case 2, J. M.) Diminutive R waves in V-2, absent R wave in V-3, and elevated S-T segments in V-2, and V-3 indicate acute anterior infarction. Note leads I, II, III, and V-4. Abnormal tracings are present in these four leads but diagnosis of infarction cannot be made.

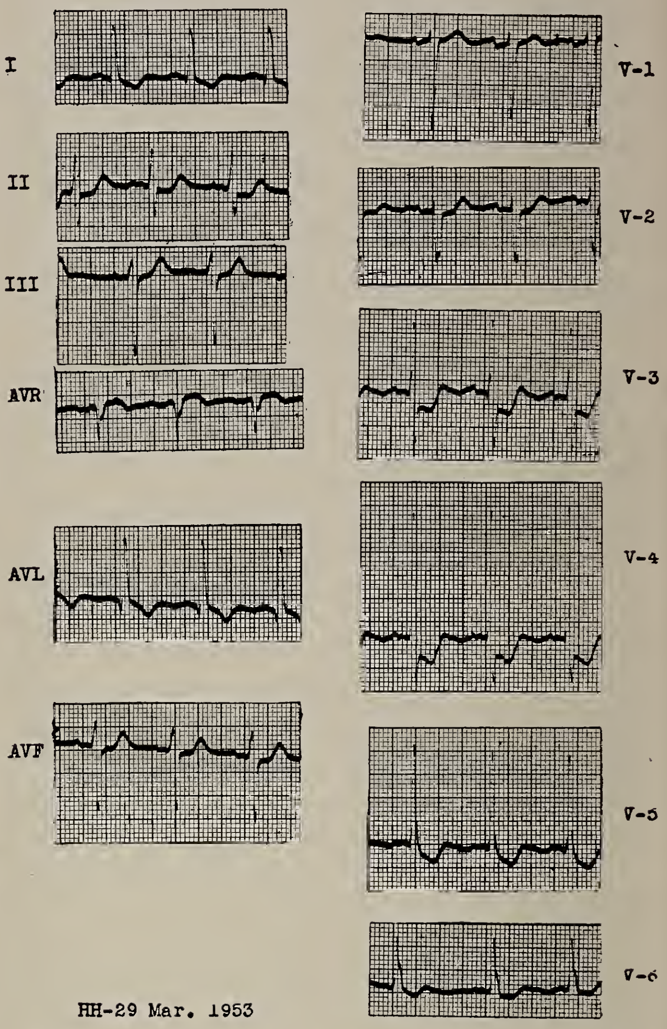

Fig. 3. (Case 3, H. H.) Depressed S-T segments in leads I, V-3, V-4 and V-5. Note that there are no diagnostic signs of infarction.

Comment: This case is presented to demonstrate the fact that a patient can have a typical clinical episode of myocardial infarction which produces presumptive changes in only one precordial lead. In this instance, a widened QRS-T angle is present, suggesting coronary artery disease, and the absent R wave in V-2 with notching of the Q wave suggests a small dead zone. Without lead V-2, even the presumptive diagnosis of infarction cannot be made.

Case 2. J. M., a 70 year old farmer, had three episodes of precordial pain during the two weeks prior to his initial examination. When first seen, he had been experiencing severe precordial pain for the previous twelve hours, associated with pallor, sweating, nausea and vomiting. Examination revealed a seriously ill, aged man in shock. An electrocardiogram (fig. 2) revealed an acute anterior infarction. He was hospitalized and treated diligently with nor-epinephrine infusions, oxygen and other supportive measures. Serial electrocardiograms revealed the development of severe conduction disturbances. The patient died fifteen hours after admission. Autopsy revealed both an anterior and a posterior infarction. An adherent thrombus was found in the anterior descending branch of the left coronary artery, and a more recent thrombus was demonstrated in the right coronary artery.

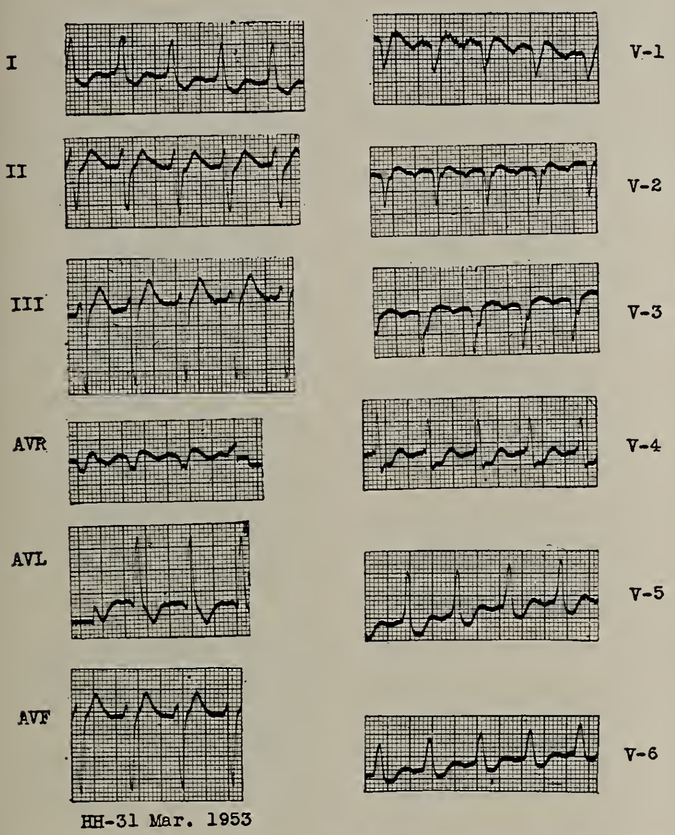

Fig. 4. (Case 3, H. H.) The repeat electrocardiogram the next day in this case was essentially the same as the first one except that the R wave in leads V-2 and V-3 are now absent, indicating infarction. Autopsy demonstrated an anterior myocardial infarct.

Comment: This case is described to demonstrate a proven anterior infarction which could not have been diagnosed by using only the leads I, II, III and V-4. It will be noted that the characteristic changes of infarction are found only in leads V-2 and V-3. In retrospect, it was decided that the posterior coronary occlusion occurred after hospitalization, causing the conduction disturbances (not shown). Thus, at the time the first electrocardiogram was taken (fig. 2), only an anterior infarct was present.

Case 3. H. H., an 85 year old farmer, was stricken with excruciating precordial pain while walking in his yard. When seen thirty minutes later, he was found to be in acute distress and writhing in pain. An electrocardiogram taken after the patient had become quieted with Demerol (fig. 3) revealed marked depression of the S-T segment in leads V-3, V-4 and V-5, but no diagnostic signs of infarction. A repeat electrocardiogram the following day (fig. 4) revealed complexes in V-2 and V-3 diagnostic of an acute anterior infarction. The patient went into shock and despite diligent efforts and administration of the usual medications, including nor-epinephrine, he died on the fourth day. Autopsy revealed an extensive anterior myocardial infarction. No occlusion of the coronary arteries could be demonstrated, however.

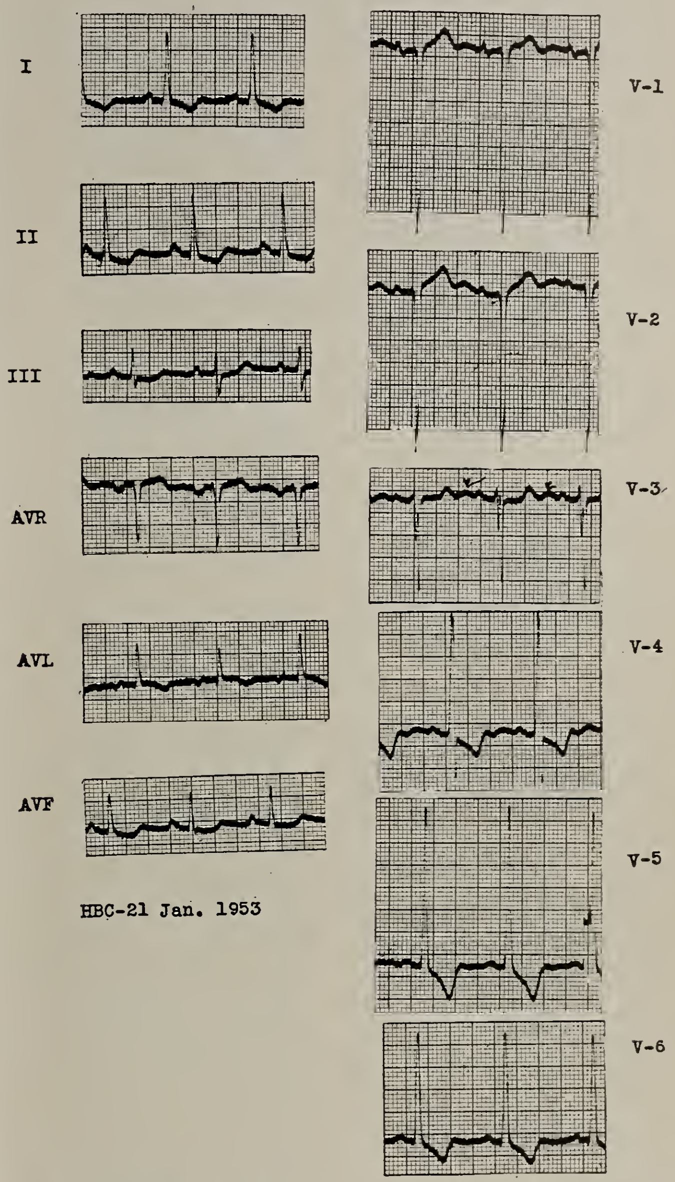

Fig. 5. (Case 4, H. B. C.) Left ventricular hypertrophy and strain. Abnormal QRS complex in V-3 suggestive of old infarct.

Comment: This case demonstrates clearly two points:

1. Early in the course of infarction, diagnostic changes may not be present. The S-T depressions in this case could have been due to: (a) acute coronary insufficiency, (b) acute posterior infarction, (c) subendocardial infarction, or (d) as it turned out, the initial stages of a transmural anterior infarction.

2. The thesis of this paper is also demonstrated in that the electrocardiographic changes diagnostic of infarction could not have been found on the 4-lead electrocardiogram.

Case 4. H. B. C., a 65 year old retired railroad engineer, had suffered a "heart attack" three years previously and since that time had been under medical care for cardiac decompensation. Under a regimen of digitalis, mercurial diuretics and other supportive measures, he had been doing well except for exertional dyspnea. The blood pressure was 125/74 and the heart was enlarged. There was a grade 4, harsh systolic murmur at the aortic area. The second aortic sound was absent. The diagnosis of calcific aortic stenosis had been made by several observers. An electrocardiogram taken in January 1953 revealed (fig. 5) characteristic signs of left ventricular hypertrophy and strain. The small R wave and notched S wave in V-3 were interpreted as suggestive of an old infarction. A second electrocardiogram (fig. 6) four months later taken twenty-four hours after an episode of precordial pain with radiation down the left arm, lasting one hour, showed only one significant change: the S-T segment in V-3 was depressed 1.5 mm., whereas previously it was depressed 0.5 mm. Two hours after this electrocardiogram was taken, the patient experienced severe precordial pain radiating down both arms, associated with pallor, sweating and vomiting. The pain lasted four hours. The patient was hospitalized the following day. A repeat electrocardiogram (fig. 7) done three days later revealed one further change: the R wave in V-3 was now completely absent and was replaced by a "W" type Q wave. After three weeks of bed rest, anticoagulants and other measures, the patient was made ambulatory. He has had an uneventful convalescence and, now, ten months following his attack, is active about his farm.

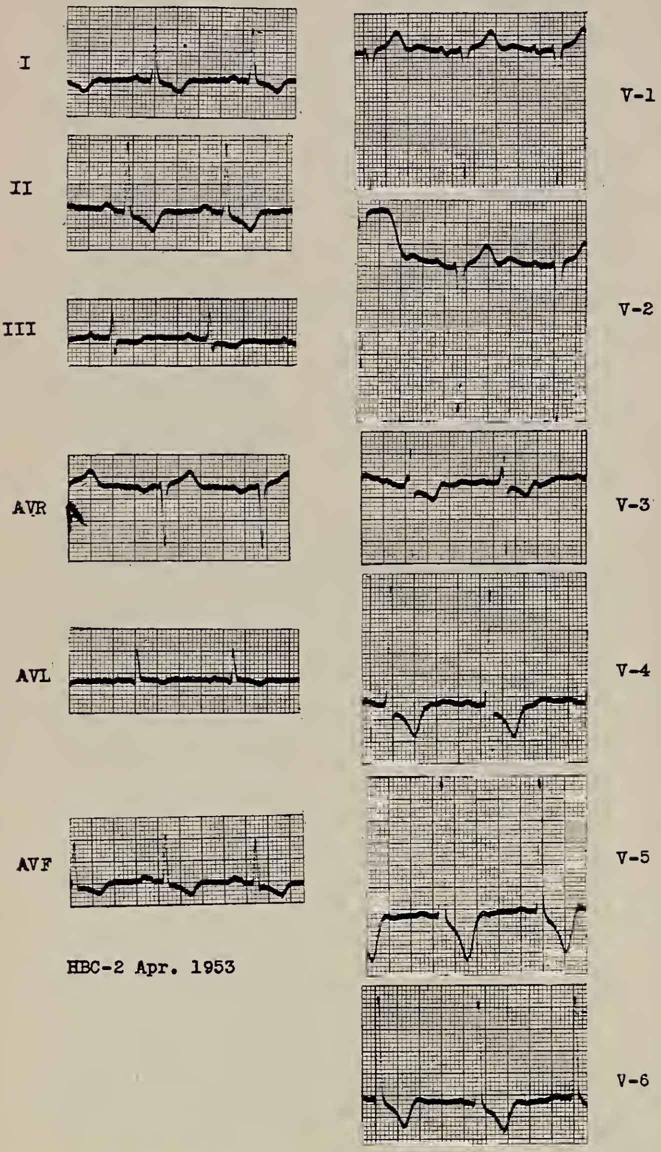

Fig. 6. Electrocardiograph taken after episode of chest pain. Slight depression of S-T segment in V-3 is the only significant change from previous graph.

Comment: This case demonstrates clearly how serial changes in an electrocardiogram indicating an acute anterior myocardial infarction may be present in only one lead.

Case 5. H. R., a 74 year old retired businessman, was first seen in January 1953, complaining of right sided chest pain initiated by effort. He gave a history of having had a "heart attack" with severe precordial pain three years previously at which time he had been restricted to bed for two weeks. A 12-lead electrocardiogram (fig. 8) showed normal findings in all leads except V-2 and V-3. In these leads, the absent R waves and notched QRS complexes are presumptive signs of an old, healed anterior myocardial infarction. The patient is practically free of anginal attacks seven months after this electrocardiogram was taken.

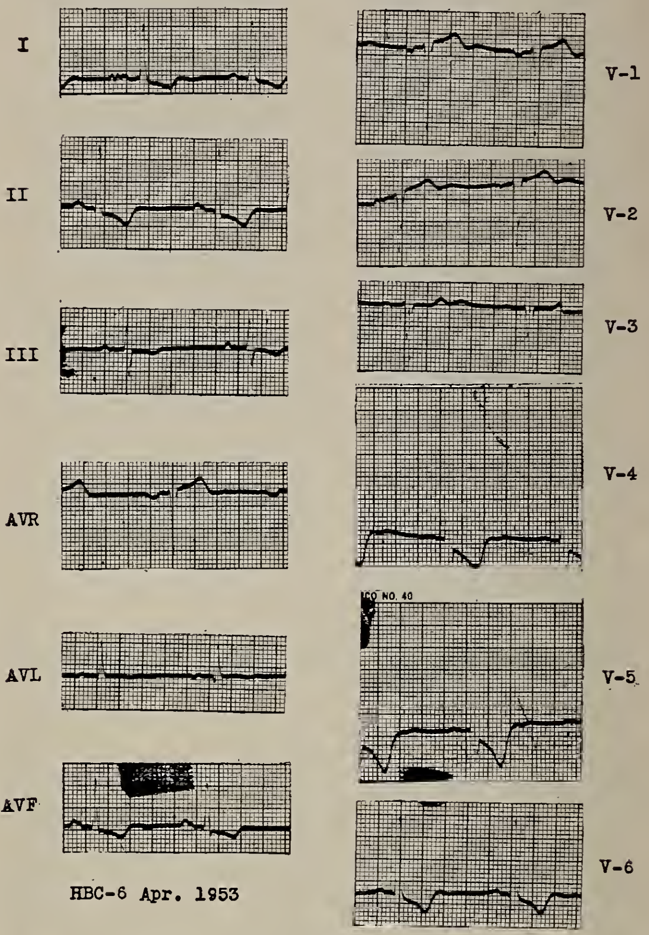

Fig. 7. (Case 4, H. B. C.) Three days after obvious clinical episode of acute coronary occlusion. Only change is absent R wave in lead V-3.

Comment: This case demonstrates how an old healed myocardial infarct can be evident on an electrocardiogram only if adequate electrode exploration is undertaken. Diagnostic signs are present only in leads

V-2 and V-3. Had only four leads been recorded, the tracing could have been recorded only as normal.

SUMMARY

1. The thesis is presented that a 12-lead electrocardiogram is necessary as a routine study in clinical cardiac problems.
2. Five cases of myocardial infarction are presented to demonstrate the value of the 12-lead electrocardiogram.

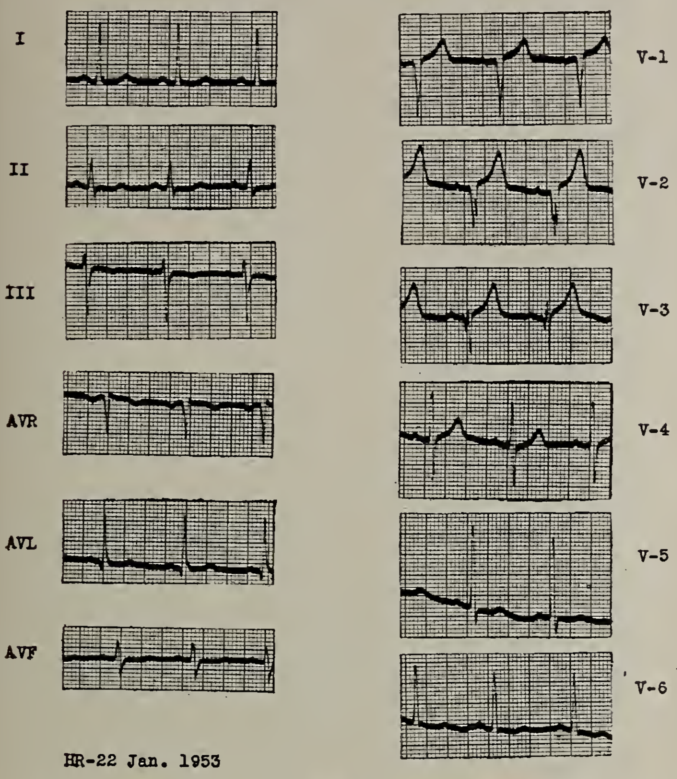

Fig. 8. (Case 5, H. R.) This would be classified as a normal electrocardiogram were it not for leads V-2 and V-3. Absent R waves and notching of the Q indicate an old healed anterior myocardial infarction.

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Promises Made to Be Kept

. . . the President, like every doctor, knows the truth about political medicine. He knows that it will destroy the quality of medical care and break down the physician-patient relationship. He is likewise cognizant of the fact that government medicine will raid the pocketbook of every taxpayer and threaten the personal freedom of every American citizen."—Edward J. McCormick, M.D., President A.M.A.

Advertisement

From where I sit
by Joe Marsh

Wish I'd Said That

You know Miss Perkins. Well, she's been driving her own car around our town for a little more than 30 years.

The other day she had a bit of trouble parking down on Main Street. Didn't quite make it the first try, so she pulled out to start over when a fellow waiting to pass started tooting his horn impatiently.

On the second try, she was still having a little difficulty, so this smart aleck behind her hollered, "Lady, do you know how to drive?" "Yes, young man," Miss Perkins answered, "I do. But I don't have time to teach you right now."

From where I sit, it's not always easy to have a good answer ready just when you need it. But when somebody tells me how to practice my profession, for instance, or to choose tea instead of a temperate glass of beer I like with dinner, I know the answer. We all have a right to our own ideas . . . and none of us like "backseat driving" from anybody.

Joe Marsh

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Postgraduate Review

Rehabilitation in Rheumatoid Arthritis

OTAKAR MACHEK, M.D., AND MARIE ANNE BROWN, B.S., *St. Louis*

IN SPITE OF THE extensive work done in recent years, the management of the arthritic patient is still a difficult problem. Every year 147,000 persons are disabled by this disease. The advent of hormone therapy did not solve the problem of management and the patient is still faced with the possibility of loss of range of motion and development of crippling deformities. The rehabilitation of the patient should start, therefore, with prophylaxis. In some cases even the best of care will not prevent contractures. Prophylaxis should include not only preventive measures to maintain good range of motion but those methods which will assure the longest possible remission or arrest of active disease. To accomplish this, a relaxed life without strenuous physical activity is desirable. Psychosocial and vocational counselling are needed to assist in readjusting to a new job and environment. The need for prompt rehabilitation is obvious since most arthritic patients are stricken by the disease at the time of their greatest earning capacity.

Many with chronic arthritis are so disabled that they cannot take care of themselves and need help from another member of their family. This prevents a second person from gainful occupation and thus handicaps two in one home. Others with rheumatoid arthritis may be unable to work but they have acquired the ability to care for themselves. In planning a program of rehabilitation it is helpful to determine the patient's present capacity and future needs.

These can be divided into such activities as sleep, self care, travel, work and recreation. Testing these activities helps to evaluate the patient's functional capacity. It is easy to determine the patient's ability to sleep, while the others are appraised by tests of the activities of daily living, including travel. The aptitude for work is tested by a vocational counselor, and includes trials in work therapy. With this information and the medical and social history, one can evaluate the patient's disability. However, it should be clear that the disability is not so much what the examiner perceives it to be as it is what the patient perceives it to be, and this brings into focus the psychologic aspects of rehabilitation and some of the problems in achieving acceptance rather than surrender to disability.[1]

The functional capacity evaluation is based on twenty-four hour observations and testing. The physical, mental, vocational, social and economic aspects are considered. Rehabilitation procedures are then planned to augment the remaining abilities, with intermittent rest periods depending on the activity of the disease. These include not only modalities of physical therapy and occupational therapy, but also phychosocial help in adjustment and planning, vocational testing and guidance, and general supportive treatment, including recreation. The last is important in helping maintain motivation. Physical rehabilitation and medical treatment combined get better results than either of these treatments alone.[2] Since there are so many considerations, rehabilitation cannot be accomplished by the rheumatologist alone, but by a group of workers who assist him to achieve the best possible end results. This group of workers form the rehabilitation team. All civic resources are utilized in achieving these goals.

CLASSIFICATION OF RHEUMATOID PROGRESSION

Stage	*Roentgenologic Signs*	*Muscle Atrophy*	*Extra-Articular Lesions (Nodules Tenovaginitis)*	*Joint Deformity*	*Ankylosis*
I	Osteoporosis sometimes no destructive changes	0	0	0	0
II	Osteoporosis slight cartilage or subchondral bone destruction may be present	Adjacent	May be present	0	0
III	Osteoporosis cartilage destruction bone destruction	Extensive	May be present	Subluxation ulnar deviation and/or hyperextension	0
IV	Same as III with bony ankylosis	Extensive	May be present	Same as III	Fibrous or bony ankylosis

CLASSIFICATION OF FUNCTIONAL CAPACITY

Class		
I	Complete	Ability to carry on all usual duties without handicaps
II	Adequate for normal activities	Despite handicap of discomfort or limited motion at one or more joints
III	Limited	Only to little or none of duties of usual occupation or self care
IV	Incapacitated, largely or wholly	Bedridden or confined to wheelchair; little or no self care

Considering the more severely handicapped,[3] such as in class III and IV and stage III and IV,

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doctors are frequently unable to contribute much by medication and it is in these cases that the ingenuity of everyone, including the patient, is needed. In this group of patients one frequently observes hostility toward physicians for their failure to cure the disease. The combined approach of the members of the rehabilitation team which is harmonious, frequently alters a patient's attitude toward the medical profession. It is the community's responsibility to care for the arthritic patient so he does not become permanently and totally disabled.[4]

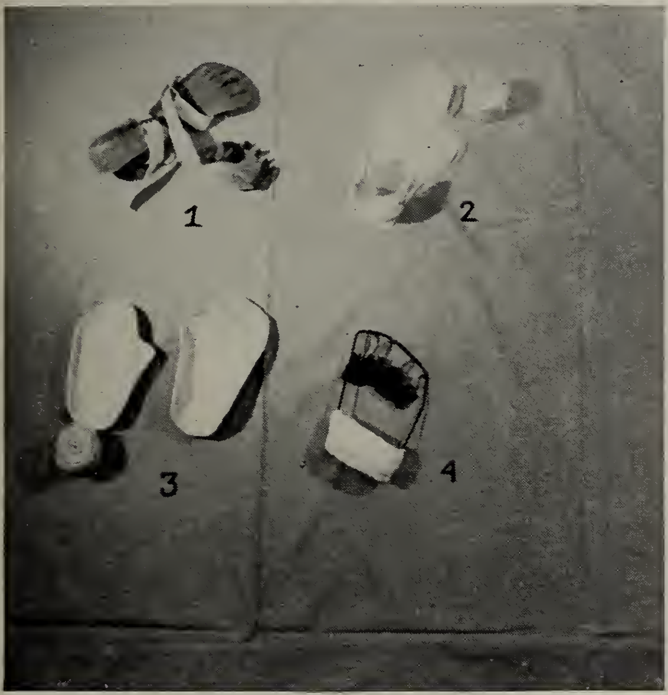

Fig. 1. 1. Celastic cock-up splint. 2. Plastic extension splint. 3. Plaster night splints. 4. Cynamic splint.

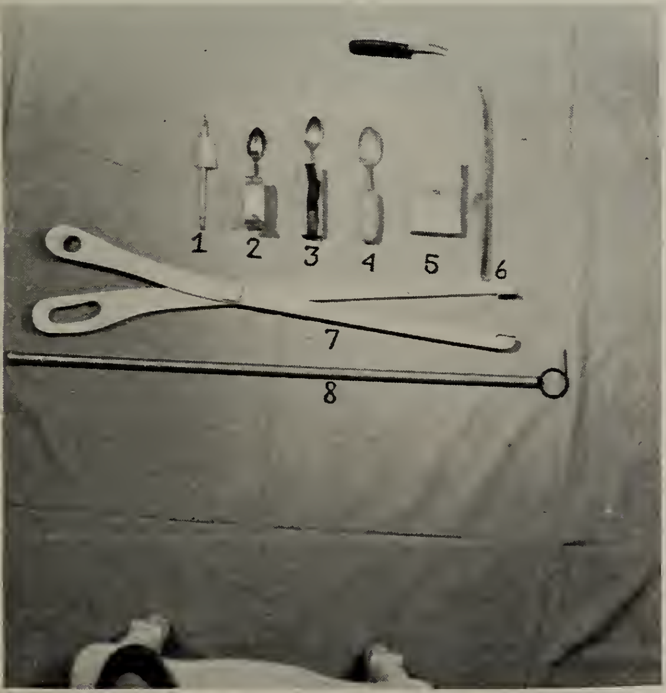

Fig. 2. 1. Pencil with foam rubber. 2. Spoon with aluminum handle. 3. Spoon with wood and leather handle. 4. Spoon built up with dental wax. 5. Bath sponge with plastic handle. 6. Comb with plastic extension. 7. Wooden reaching scissors. 8. Aluminum reaching pole.

Physical therapy, with its modalities, especially various forms of heat and exercise, is an essential part of the treatment. In order to maintain the improvement in range of motion, splints are made. The splints are used to prevent further deformities. These may be made in the associated occupational therapy workshop. Night splints are of the static type and made of light weight materials such as shells of plaster, plastic and celastic.[5] Splints of the dynamic type using wire extensions and rubber bands with leather slings are used.[6] These allow exercise, thus preventing deformity without causing atrophy (figure 1).

Gadgets are made to improve function. Numerous simple and inexpensive adaptations of equipment increase the patient's independence. Utensils, handles, even electric switches, may be used by a patient when built up to permit a firm grip, Dental wax, sponge rubber, plastic, wood, leather and celastic are used (figure 2).

Activity of the disease in the weight bearing joints frequently limits ambulation. A long leg brace with ischeal ring is used to diminish the amount of weight on the hip, knee and ankle joints, thus facilitating ambulation by reducing pain. This preserves the joint cartilage (figure 3).

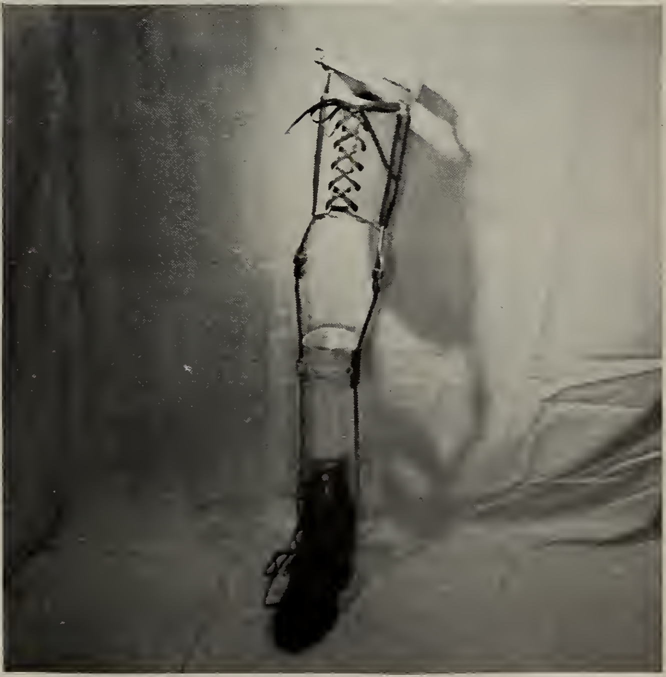

Fig. 3. Long leg brace with ischeal ring.

There are many other gadgets which improve the patient's function. For example, a crutch with dental wax built up hand grips in a conicle shape. This diminishes ulnar deviation and subluxation at the metacarpo-phalangeal joints (figure 4). Another is a wheel chair hydraulically operated so as to elevate the seat thus enabling a severely disabled arthritic to get up without assistance (figure 5).

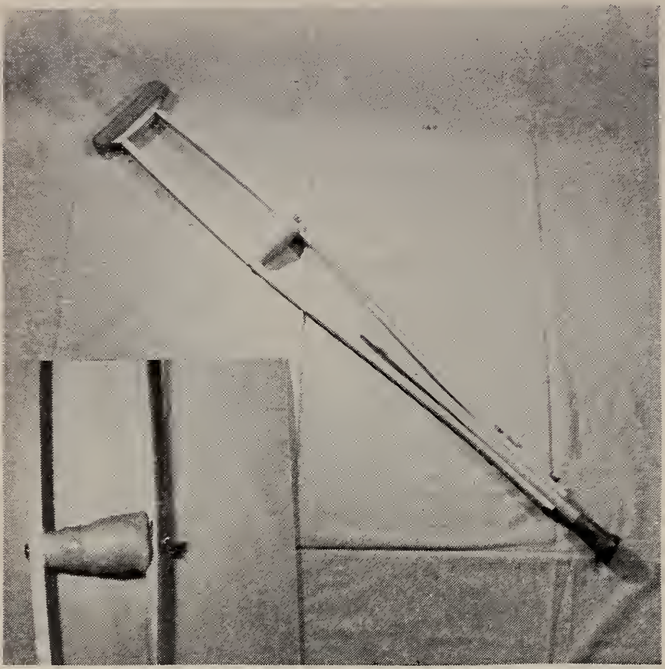

Fig. 4. Built up crutch grip.

Systematic[7] training in activities of daily living is important in achieving personal independence. This is but one facet of a combined treatment in which the dynamic approach is stressed, as this is true in all rehabilitation procedures. One learns how to get satisfaction from minor achievement on the part of the patient to whom the progress is of major importance. Details must be stressed in successful rehabilitation of the severely disabled arthritic patient. For example, the inability to get up from a toilet seat may be of major concern to the patient. In this instance, an elevated toilet seat can be installed. Attention given to such details as this stimulates confidence in accomplishment and improves morale (figure 6).

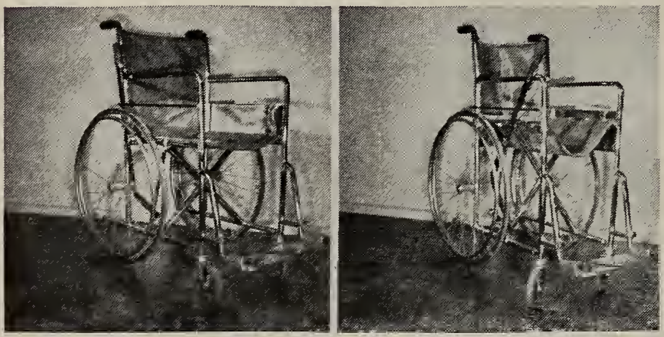

Fig. 5. Hydraulically operated wheel chair.

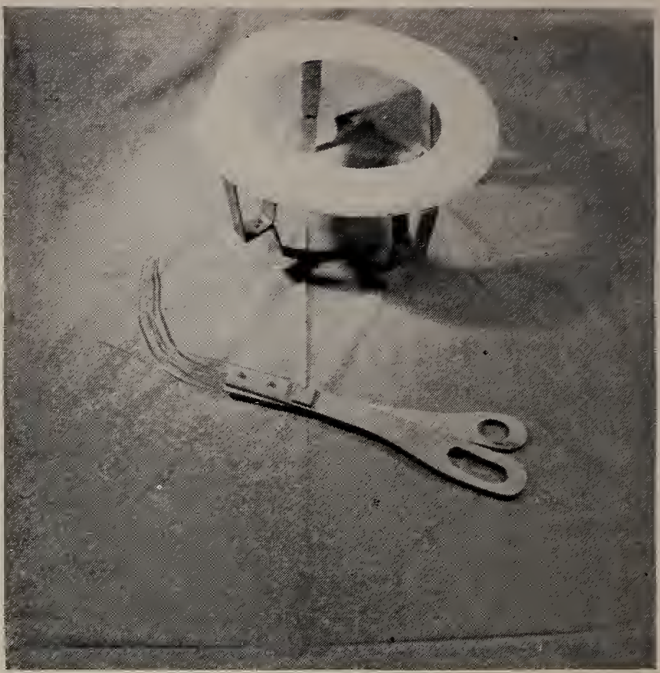

Fig. 6. Elevated toilet seat and wood and plastic scissors.

This point is illustrated by one case report. I. W. is a 64 year old man who has had rheumatoid arthritis and spondylitis for twenty years. His disease is now inactive but it has resulted in ankylosis of the entire spine, in severe kyphosis, flexion contractures of the knees and hips and some limitation of motion in the shoulders and elbow. There are deformities of the hands. When standing, the patient's horizon is about two yards. His main problems were inability to dress himself, ambulate and take care of his toilet needs. To facilitate dressing, zippers with large tabs were put on the shoes and an extension shoe horn and hook was used (illustrated in figure 3). A plastic extension on wooden scissors (figure 6) was made and by using this he has been able to carry out his personal hygiene without assistance. This has saved him much embarrasment.

Such functional improvement need not necessarily require a long period of time. When a patient is discharged from the hospital, a home program with balanced activities and rest periods must be followed in order to maintain or increase performance.

SUMMARY

It is urgent to initiate early rehabilitation for the arthritic patient. This can be achieved by cooperation of a team of workers specializing in various fields and working closely with the physician, usually a rheumatologist, who is managing the case. In this way treatment of rheumatoid arthritis can be improved.

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Case Report

Laryngeal Diphtheria

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REPORT OF A CASE

W. E. HENRICKSON, M.D., *Poplar Bluff*

THE USE OF VAPOR inhalants for the treatment of respiratory diseases in children, originally empirical, is now widely accepted as scientifically rational therapy. Recently, nebulization of surface active material, commercially known as Alevaire,® has been successfully employed in a number of serious respiratory conditions occurring in children, including neonatal asphyxia. A search of the literature has revealed no report of its employment in laryngeal diphtheria. I recently employed Alevaire in the treatment of a severe case of laryngeal diphtheria with such dramatic results that it is felt worthy of reporting.

CASE REPORT

A 22 month old Negro male was seen on June 27, at 12:30 a.m. with a complaint of fever and sore throat for the last three days. For the previous twenty-four hours the child had refused to eat, and had experienced difficulty in swallowing and breathing. There was no history of immunization to diphtheria or other contagious diseases. The family history was noncontributory. On examination, the child appeared acutely ill and in acute respiratory stress. He had a croupy, harsh, barking cough, with retraction of the episternal and subcostal regions. Expiration was grunting and forceful. Although the child appeared thirsty, he refused to drink fluids, apparently because of respiratory embarrassment.

The temperature was 104F. by rectum, the pulse 108 and the respirations 40 per minute. The tonsils and soft palate were edematous and covered with a white, creamy membrane. Submaxillary lymphadenopathy was prominent, the child presenting the classic "bull" neck appearance. On laryngoscopic examination, a membrane was seen covering the vocal cords and extending into the trachea. Urinalysis was essentially normal. Hemoglobin was 78 per cent, red blood count 4,000,000, and white count 13,600 cells per cubic millimeter. Smear and culture of the throat were both positive for Corynebacterium diphtheriae.

The patient was admitted to the hospital and placed in a croupette tent with oxygen. It appeared that tracheotomy would be necessary because of the extreme difficulty in breathing and the pronounced cyanosis. While waiting for an otolaryngologic consultant, it was decided to attach a DeVilbiss No. 40 nebulizer to the croupette tent and to administer Alevaire. Shortly after the vapor therapy was started, breathing became less labored and the child fell asleep.

The child was given 20,000 units of diphtheria antitoxin intramuscularly and the same amount intravenously. Also he was given 50,000 units of aqueous penicillin intramuscularly every three hours. Then hours later, an additional 20,000 units of diphtheria antitoxin was injected intramuscularly. Fluids were given subcutaneously.

The oxygen and Alevaire were given in the croupette tent continuously. Codeine, grains one eighth, was administered. After about eight hours, the child appeared much improved and breathing was fairly easy. He was able to take liquids by mouth. Laryngoscopic examination at that time revealed that the vocal cords were much less edematous and the lumen of the larynx and the trachea less obstructed.

Improvement was progressive through the next several days. On June 30, the child was improved to the extent that he could take a soft diet. On July 2, medication, including oxygen and Alevaire, were discontinued. The patient was discharged to his home on July 7, at which time throat cultures were found to be negative for diphtheritic organisms. His improvement at home was progressive and recovery appeared complete.

DISCUSSION

Miller[1] first demonstrated that inhalants of the surface active agents Tween 20 and Triton A-20 were apparently safe for the adjuvant therapy of tuberculosis.

Later, Miller and others[2] employed Triton A-20 with streptomycin in the treatment of advanced pulmonary tuberculosis in children. Miller and Boyer[3] showed by animal experiments that Triton A-20 was safe to administer in effective concentration as a mist. Further studies by Miller and Boyer[4] corroborated the safety of Triton A-20.

In 1952, Miller[5] described an apparatus for prolonged administration of Alevaire. An improved surface agent, Alevaire consists of "an aqueous solution of a new nontoxic detergent, oxyethylated tertiary octylphenolformaldehyde polymer, 0.125 per cent, in combination with sodium bicarbonate and glycerin."

Ravenel,[6] by in vitro experiments, showed that inhalation of Alevaire as a mist resulted in the thinning of viscid secretions. The viscosity of saliva was lowered by 10 per cent, bronchiectatic pus by 19 per cent and amniotic fluid by 24 per cent when Alevaire mist was bubbled through the three substances. Ravenel gave an excellent description of the physical action of detergents and expressed the opinion that tracheotomy might well be abolished in the treatment of laryngitis and laryngotracheobronchitis by the use of Alevaire mist and oxygen.

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The rationale for the use of Alevaire in laryngeal diphtheria seems clear, since the diphtheritic process involving the larynx, trachea, vocal cords and, perhaps, the bronchi, is accompanied by viscid excessive respiratory tract secretions. This is particularly true if secondary pneumonia, which not infrequently complicates laryngeal diphtheria, is present.

Diphtheria still occurs endemically and epidemically throughout the world. About one fourth of all cases of diphtheria involve the larynx and the trachea. A primary problem in laryngeal diphtheria is the obstruction to breathing. In the past this has been relieved by steam inhalations, aspiration, intubation or tracheotomy. The hazards of intubation and tracheotomy are well known and permanent disability may follow their use.

According to Bradford,[7] the indications for intubation are extreme dyspnea, marked retraction of the episternal and subcostal areas, increasing cyanosis and weakening heart action. Persistent stridor and restlessness, worsening after the patient has been placed in a croupette tent, have been cited as definite indications for intubation even before the development of cyanosis.

It can thus be seen that the usual indications for intubation existed in the case described. The prompt response of this infant to the administration of Alevaire, along with the other measures, would seem to merit the trial use of this technic in other patients.

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Special Articles

Castration for Cancer

REV. GERALD KELLY, S.J.

AN EARLY ETHICAL appraisal of castration for prostatic carcinoma stressed the fact that the disease was rarely diagnosed in time for complete cure, that without treatment it would become incapacitating and excruciatingly painful, and that considerable palliation could be effected through estrogen therapy or orchidectomy or both. On the basis of this clinical picture, the moralist judged that the palliative treatments were permissible. His one reservation was that if the needed benefits could be procured through estrogen alone the more radical procedure of orchidectomy should be excluded.

That was almost ten years ago. Today the clinical picture is essentially the same. Except in special cases in which routine rectal examinations are regularly made of men approaching middle age, early diagnosis of prostatic cancer is still rare. The disease is admittedly fatal and fiercely painful unless properly treated. But with endocrine control of the neoplasm, the patients gain weight, are dramatically relieved of metastatic pain, and are enabled to carry on their normal activities for a considerable period of time. The principal methods of endocrine control are still estrogen therapy and orchidectomy.

No doubt the good physician would instinctively judge that even such a radical procedure as castration is ethically justifiable when it offers the hope of great benefit to a man with a fatal and painful illness and when this benefit cannot be obtained through simpler means. The instinctive judgment is correct. Yet, in morality as in other sciences, it is both interesting and profitable to check instinctive judgments to see whether and how they square with scientific principles. The purpose of the following paragraphs is to show how the moralist arrives at the reasoned conclusion that castration is permitted in the treatment of prostatic cancer.

PART-FOR-WHOLE

The principle to be applied in judging the morality of a mutilating procedure is the principle of the part-for-the-whole. St. Thomas Aquinas enunciated this many centuries ago when he wrote: "Since any member is a part of the whole human body, it exists for the sake of the whole, as the imperfect for the sake of the perfect. Hence, a member of the human body is to be disposed of according as it may profit the whole. *Per se,* the member of the human body is useful for the welfare of the whole body....If, however, a member, by reason of its diseased condition, should endanger the well-being of the whole body, it is permissible, with the consent of him whose member it is, to remove this diseased member for the well-being of the whole body."

St. Thomas spoke only of a "diseased" member. This should be understood as merely one example, and not as a necessary limitation of the principle of the part-for-the-whole. Through the centuries eminent moralists have discussed three typical cases in which the principle might be applicable. The first of these concerns the diseased organ, as in the example given by St. Thomas. The second is illustrated by the case of the man whose foot is caught in a railroad track and who can save his life only by amputating the foot. The third concerns the perfectly healthy man who is ordered by a tyrant, "Cut off your hand or I'll cut off your head." In all cases the sacrifice of the part would be permitted as a necessary means of preserving life.

The third case may sound fantastic (although, as a matter of fact, examples in which it is equivalently verified are not rare even in our modern "refined" civilization), but both it and the second case illustrate the point that a destructive procedure can be justified even though an organ is not diseased in the technical sense. For a legitimate mutilation, it suffices that the presence of the organ be a real source of harm to the whole body.

In all the typical cases the organ was sacrificed in order to ward off the danger of death. This extreme is not necessary. The bodily members and functions exist not merely for survival but also for maintaining a reasonable state of well-being. The sacrifice of a part, therefore, may be justified when this is necessary for alleviating great pain or removing an incapacitating condition. But the benefit to be reaped in terms of total well-being should be proportionate to the destruction involved. Good morality demands this, and good medicine concurs.

The application of the foregoing remarks to castration for prostatic cancer is readily seen. Although the gonads themselves are not diseased, their endocrine function is harmful to the patient, and the suppression of this function is a source of great benefit to him. To excise the gonads, therefore, is simply to apply the principle of the part-for-the-whole. The sole qualification to be considered would be that if estrogen therapy alone would produce the desired benefits, there would be no proportionate reason for orchidectomy. According to highly reputable medical authorities, it seems that both procedures are generally indicated; consequently, both are allowed.

FURTHER OBSERVATIONS

For the sake of completeness, I should point out that in castration there is one effect not associated with the sacrifice of non-reproductive organs. I refer to the loss of generative power—if indeed these patients still retain that power. Even this effect presents no moral objection to the procedure, because the castration is obviously for the suppression of endocrine function and the loss of generative power is simply an inevitable by-product.

My discussion has been primarily concerned with surgical castration because this is most commonly mentioned in the medical literature. Nevertheless, I have seen some references to x-ray castration and I have been told by distinguished urologists that this procedure produces the same benefits as surgical castration. This is rather a question of technic than of principle; and I leave the judgment to physicians. Certainly, if irradiation is also a satisfactory means of androgen control, it is also justified on the principle of part-for-whole.

Finally, the principle seems also applicable to castration of women in the treatment of carcinoma of the breast. I have many references to medical literature on this topic, but I find them somewhat confusing and much more difficult to appraise than the literature on prostatic cancer. But, though the literature is not always clear, many physicians have assured me that suppression of ovarian function offers palliation to women with breast carcinoma and helps to retard metastasis. The medico-moral code of the Catholic Hospital Association allows castration, at the discretion of the physician, in the treatment of both prostatic and mammary cancer. In making this provision, the code is not taking sides in any medical dispute; it is simply allowing physicians and their consultants to make their own conscientious decisions as to the treatment of choice in these difficult and desperate cases.

They Don't Wear Out . . .

. . . It is my opinion that the middle-aged heart rusts out rather than wears out. If the individual is in good health, exercise will be beneficial. Adequate rest must be encouraged, and advice concerning stress and strain of both physical and emotional states should be given. These problems are usually individual, and should be so treated by the physician.

The question of retiring from work is important. In my opinion, the individual should not completely retire unless he has definitely failing health, but he should change to lighter and less difficult work, commensurate with his physical condition.—William B. Kountz, M.D., St. Louis, "Heart Disease in Mid-Life," *Journal Michigan State Medical Society.*

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Let Us Hear From You!

During our first year with MISSOURI MEDICINE, we invited our readers to let us know what material they would like to have appear. Many accepted this invitation. We are grateful for the response of verbal and written comments; naturally, not all were favorable. Some of our readers have not approved each and every article or contribution we have presented, although our constructive critics have been outnumbered (in a lop-sided proportion) by those who apparently have approved.

It is an impossible task to edit a state medical journal, in any state, and completely satisfy every member. We may as well accept this statement as axiomatic. Therefore; what to do? It would seem most sensible if we try to suit as many of our members as we can, despite the carping criticism of a few who would cast every endeavor in their own particular mold. This, we have tried to do.

However, your editor would deeply appreciate a letter from every reader—we guarantee to read them and to answer them, if an answer is indicated. And, insofar as it is humanly possible, we will carry out suggestions or recommendations. Remember, sometimes it's rather difficult or impossible to do exactly what our readers wish, no matter how hard we try.

Why not look over your current copy of MISSOURI MEDICINE, now? Pick out the items you like, the presentations you do not like, and write us, so we may know who's reading what.

We have never seen a better written paragraph or a more neatly packaged philosophy on the job of being editor, than the following, which we lifted from the San Francisco Bulletin, from the pen of Herbert C. Moffitt, Jr., M.D.:

"An Editor should be sensitive to the opinions of the membership, its elected representatives, and its appointed committees. We ask for, and welcome, the opinions of the members, and are always eager to receive their ideas for publication in 'Letters to the Editor.' If they are not forthcoming, an editor can only exercise his own judgment; we maintain that the chief duty of an editor, is to edit."

To this, we can merely add a hearty, Amen! Again, we invite you to let us hear from you.

VINCENT T. WILLIAMS, M.D.

Prefabricated Belly Laughs

In any random group assembled today you will observe a peculiar phenomenon. Let someone make a disparaging or sneering remark about doctors or the medical profession—then, no matter how nonfactual or how inane the remark—it sets off a chain reaction of belly laughs. These laughs contain no mirth and do not reflect mirth or cerebration on the part of those laughing—whose only emotion is probably surprise at the discovery of the number of others also so vibrating and laughing. The laughter continues to vibrate until the reaction reaches a final hollow mirthless banality and then subsides with those participating not knowing what it was all about.

This shows what one-sided propaganda can do—even in a "free" country. For twenty years our people have been subjected to ceaseless and unfair attacks on organized medicine. Not that organized medicine was particularly guilty—but it was the vulnerable spot for starting a socialized state. The government had its printing presses and franking privileges at its disposal and injunctions against medicine to fight back.

If medicine could have been socialized, we would today be operating under a socialized state. Thank God that we held firm.

But, to get back to our prefabricated belly laughs—we just have to temporarily laugh and shrug them off, but we should have a far-reaching program of reeducating the public and depropagandizing it. We must be careful not to, through our own acts, excite commotion and further confusion. Let us all engage in a widefront battle and talk this matter over personally with our many patients and other friends.

F. T. H'Doubler, M.D.

Get Set *Now*, Brother, Get Set

Old Jess earned his livelihood during the summer months working with a threshing crew. During the remainder of the year he did odd jobs in the neighborhood, fixing roofs, painting, husking corn, or what have you. He was one of the old school. He did his work well and was proud of it. Old Jess was black as coal. No one knew how old he was including Jess himself; eighty, ninety, maybe a hundred. Rumor had it that he had taught school in his younger days. He probably did. He understood German and French as well as English. And Jess was a philosopher.

On one hot summer day while pitching wheat bundles up to me on a wagon Jess drifted off on a tangent and began: "You know what's wrong with most people? They's always gonna do sumpin but they never gits set, cause now ain't the right time to do it. Either the weather ain't right, the times ain't right or sumpin ain't right. Trouble is, the right time never comes along and they keeps waitin and waitin and befo long they fergits what they's bin waitin fer. Most anybody knows the right time to do what youse gonna do is right now befo you fergits it or gits too tired."

No one can deny the wisdom of Jess' philosophy nor deny its application to many past or present phases of his own life. The busy preoccupied physician lets many an opportunity slip away because of the paramount necessity of caring for his patients. He must plan well in advance for recreational and postgraduate absence from his daily grind. So also must he plan in advance for attendance at conventions. The Missouri State Medical Association meets in St. Louis early next month. This meeting culminates a whole year's planning by your officers and committees. It was arranged just for you. Your presence will make it a success.

Using the vernacular of old Jess, you know what's wrong with most people, so get set NOW, brother, get set!

Martyn Schattyn, M.D.

Neonatal Mortality

Several recent articles stress the fact that too many infants die. Early infant mortality still presents a major problem, a problem of national importance. (Latourneau, J.A.M.A., Oct. 3, 1953.) In Chicago, 52 per cent of all infant deaths occur during the first three days; 70 per cent from two causes: abnormal pulmonary ventilation and birth injuries. (Bundensen, J.A.M.A. 153:466-473.) The usual hazards during the neonatal period are asphyxia, atelectasis, birth injuries, congenital malformations and infections. (Clifford, J.A.M.A. 153:473-476.)

A vitally important factor to the newborn, especially to the premature, is his share of placental blood. Ballentine (Penn. Med. J. 1947) found that by delayed clamping of the umbilical cord, until pulsations had ceased, an average increase of 96 cc. of blood was obtained.

De Marsh, et al (Am. J. Dis. Child. 1942), found immediate cord clamping deprived the newborn infant of 107 cc. of blood; blood flowing freely, from the severed cord, averaged 107 cc. The average blood volume of infants allowed to receive placental blood was 361 cc. or 11.8 per cent of body weight; this average was only 301 cc., or 9.6 per cent of body weight, with immediate cord clamping. An infant, born by normal precipitate delivery, receives the placental blood, as shown by the pale, extruded placenta and the collapsed cord.

With these facts in mind, it is difficult to understand why placental transfusion has failed to receive more wide spread recognition. McCausland, et al, (Cal. Med. 1949), received 1,198 answers to 1,900 questionnaires sent to Diplomates of the American Board of Obstetrics and Gynecology. About one half clamped the cord immediately; one third clamped the cord less than five minutes after birth. Thus, three fourths clamped the cord within five minutes of birth.

Larsson's questionnaire (Am. J. Obst. & Gyn. Jan., 1953), to 2,000 members of the same group, showed 41 per cent waiting for cord pulsations to cease; 20 per cent gently stripping the cord until pulsations cease, and 30 per cent immediately clamping the cord.

No mention is made, in these two articles, of shock, from blood volume lack; nor does Bundensen mention it in "Natal Day Deaths" (Section on Pediatrics, A.M.A., New York, June, '53). This could be an important mortality factor during the first forty-eight hours, although, blood volume studies on the newborn admittedly are difficult; and, investigations of this problem are most vital in solving this question.

Unless there is incontrovertible proof that placental blood is harmful to the newborn infant, we urge every effort be made to insure his receiving blood to which he is entitled by philosophic reasoning and physiologic observation.

Daniel V. Landau, M.D.

Fraternally Yours

From Our Notebook on the A.M.A. Interim Session

THE GUY WITH THE LONG WHISKERS

According to history, Julius Caesar was warned he would be in for trouble on the 15th of March; hence the well-worn phrase: "Beware the Ides of March."

While a mere handful of our colleagues fancy themselves in the role of Caesar, perhaps a few warnings from this soothsayer might be timely. From the *Wall Street Journal,* we read where a physician balked at telling the income tax fellows the names of his patients who were admitted to the hospital. He claimed "privileged communications" between a physician and patient, prohibited furnishing these names and addresses. The court, however, declared there was nothing secret about a person's entering a hospital. The court dismissed the physician's argument that tax agents questioning his patients (at their homes) would cause them "embarrassment or humiliation."

Said the court: "The public interest in the collection of taxes...outweighs the private interest of the patient to avoid embarrassment."

From the same source we read of a fellow-physician, a Missourian, who lost a United States Tax Court decision: This had to do with "entertainment," deducted as a "business expense."

Ruled the sixteen judges: "Only that portion of an entertainment outlay which is in excess of the amount you would ordinarily spend on yourself is deductible." Our friend was allowed only 25 per cent of his claimed deductions.

Truly, fellow-physicians, "Beware the Ides of March"; the old fellow with the long whiskers, that is!

"BAD FOR EACH OTHER"

Rarely does your reporter go to picture shows; mostly, we consider this a fare for psychotics and morons. However, there are some good shows among the half-brained, half-baked products of pot-boilers.

In scanning over the movie ads the other day, we came across one which blared forth the above title. Over in one corner, a picture showed several "men in white," huddled in an obvious simulation of a tense, operating room team. And, in an opposite picture, was a bosomy cutie, with the following subtitle spread between the two cuts: "A money-hungry knifer—risking the life of a woman he never saw before!"

Honest to goodness! that is exactly the way the ad read. Naturally, this title, this exploitation, simply *had* to arise from the recent unpleasant, and unnecessary, front page publicity resulting since a few of our medical leaders have chosen to champion their various views on fee-splitting in the public press. The dumb-wits who throw together picture shows would have been perfectly content to go along with the gooey, milk-toast, "Doctor Kildare" motif, had they not been tossed this choice morsel of juicy, raw meat for the insatiable jaws of the machine which grinds out sensationalism, labeled as "entertainment."

Even the esteemed Satevepost of January 16, came out with one called "Patients for Sale," with the *imprimatur* of Dr. Paul R. Hawley, American College of Surgeons. We merely mention this as being a successor to many other such articles lately in the public press. All these have one common denominator: To stir up questionable doubts in the public's mind concerning their own physician. One article even queried, none too subtly, should your physician be sent to jail?—or words to that effect.

This writer does not know the answer to this public airing of all the real or fancied criminal creatures in the medical profession. But, of one thing we are absolutely certain, whether one considers the public or the medical profession, only one result can be expected, and that was given in the title of the picture show. This crapulous public name calling and mud slinging definitely is, "Bad for Each Other."

SO, YOU DON'T LIKE TO GO TO COURT, HUH?

Almost every physician gripes when he has to "waste his time going to court." Of course, there are the few, in each large community, who are the habitual, professional "defendants' (or) plaintiffs'" witnesses; they find "there's gold in them mountings," particularly as they mount the witness stand.

But the average physician has a distinct distaste for this part of his work. He often depends on the leniency of the courts in stalling (or avoiding entirely, if possible) court room appearances.

We had an interesting letter last week, the gist of which we will review for the benefit of the many practitioners who (like this writer) would rather take a beating than go to court.

It seems that recently most medical witnesses have been served with subpoenas to appear in court or before the Workmen's Compensation Commission. Previously, mutual agreement was all that was needed. We understand the procedure, at present, stems from a decision of the St. Louis Court of Appeals. It ruled a party can be compelled to submit a case without benefit of medical testimony, unless he has the doctor under subpoena. This came about because a trial court refused to recess the case, until a later time, at which the physician (not under subpoena) could appear in court. In other words, this blew the case up. Colleagues, man the life boats; watch for a flood of subpoenas! V. T. W.

Missouri Medical Meetings

Missouri State Medical Association Annual Session, St. Louis, April 4-7, 1954.
Missouri Health Council Annual Spring Conference, Governor Hotel, Jefferson City, April 30, 1954.
Missouri Public Health Association Annual Meeting, St. Joseph, May 6-8, 1954.
School Health Education Workshop, at Central Missouri State College, Warrensburg, July 6-8, 1954.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—second Thursday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p. m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

"Health Insurance" is due to be unwrapped, thoroughly chewed and, at least, partly digested at the Annual Spring Conference of the Missouri Health Council. This takes place at the Governor Hotel, Jefferson City, Friday, April 30, 1954, beginning at 10 a.m. and terminating at 4 p.m. "What Rural Missouri Wants in Health Protection" is to be presented briefly by a consumer. What Group Health Insurance offers to this quest will be discussed by a representative of an insurance company writing group insurance. Then a representative of an insurance company writing individual policies will explain what individual insurance offers. Spokesmen for the two Blue Cross and Blue Shield plans in Missouri will follow these discussions with a résumé of what their plans offer. In addition to these revelations, a representative from the Department of Health, Education and Welfare has been invited to discuss the Administration's Health Program at the afternoon session, with particular emphasis to be placed on prepaid health protection and the responsibility for indigent care.

All of the participants mentioned are, also, to participate as a panel to answer questions from the floor (it's a cinch there will be plenty of them). Cannot you hear the question directed to the panel "How do I know what Health Insurance policy to buy? All of the salesmen tell me their policies are the best for the money and just what I need."

This conference is open to the public and it is hoped that many physicians may take advantage of this opportunity to hear a down-to-earth discussion of Health Insurance and incidentally pick up a few pointers to use in talking with patients about insurance. Date, April 30, 1954; Place, Governor Hotel, Jefferson City.

Members in the News

The Federation of Child Health Centers, Kansas City, recently honored several physicians at a dinner. The pediatricians, who contributed about 475 hours of their time to the several centers last year are Doctors **Charles Eldridge, J. A. Tabris, John Aull, Mildred C. Duer, Eugene P. Chatman, Bruce P. McDonald, Gerald Hughes, Milton Dodge, James T. Van Biber** and **S. F. Cockerell.**

Negotiations for the transfer of the Excelsior Springs Hospital from private ownership to that of an eleemosynary institution were recently completed. The hospital, which is currently in its fiftieth year, will retain its general medical status. The lay press paid high praise to Mrs. Margaret Sharp, the superintendent, and to **E. E. Gay**, M.D., of Richmond, "for their benevolence." Of Mrs. Sharp, the Richmond *Conservator* said ". . . she has consistently refused to accept personal gain . . . out of its earnings, the debts were paid . . . . equipment brought up to date . . . modernization program started . . . never has a dividend been paid. . . all moneys have been channeled into improvements."

Petitions for a special election in Phelps County to construct another story on the Memorial Hospital are being circulated in Rolla.

The new Henrickson Clinic, Poplar Bluff, was opened about February first. The new building, which has facilities for seven doctors on the main floor, has complete x-ray, pharmacy, snack bar, laboratory, reception room, lecture rooms and hospital rooms and wards for thirty patients.

Discussing the present status of mental health problems in Missouri, **Ernest H. Parsons**, M.D., St. Louis, was the guest speaker at the Better Films Council of Greater St. Louis. His talk was titled "Who is Mentally Ill?"

Clyde E. Kane, M.D., St. Louis, kept his record spotless when he disarmed a holdup man. This marks the fourth time that the physician has avoided loss of money or injury in the course of a holdup. He was held up in 1947, 1948 and 1951, and each time either overpowered or scared away the offender.

New Marion-Ralls-Shelby County Medical Society officers for 1954 are: **Robert J. Lanning**, M.D., president; **Merrill J. Roller**, M.D., vice president; and **Francis R. Burns**, M.D., secretary-treasurer.

The *Parma Tribune* reports that **D. W. Croom**, M.D., *summa cum laude* graduate of the University of Arkansas School of Medicine, has located in Malden. He is associated with **C. T. Edmondson**, M.D.

The *Charleston Democrat* ran a large feature item written by **M. H. Shelby**, M.D., Cape Girardeau. The article, emphasizing the effect that roads have on the practice of medicine, was descriptive of the physician's original location, Charleston.

Staff members of the city hospitals in St. Louis have petitioned for the organization of an Institute of Medical Education and Research, under the direction of **Leo V. Mulligan**, M.D. The organization would be a non-profit organization intended primarily for the training of resident staffs and the conducting of research projects.

Kansas City Radiologist, **John W. Barry**, M.D., has been certified by the American Board of Radiology.

Kansas physicians heard two MoMedics speak. At Topeka and Manhattan **Carroll P. Hungate**, M.D., spoke on "Civil Defense," and at Ottawa, **John W. Walker**, M.D., spoke on "Isotopes in Medicine."

Retiring from practice, **Luther M. Callaway**, M.D., Kansas City, has moved to Clearwater, Florida.

". . . to effect a program for the cure of the mentally ill and mentally retarded as recommended by the standards of the American Psychiatric Association" is the purpose of the "Missouri Citizens' Committee for Mental Hospitals and Training Schools." The organization was formally launched near the end of January, headed by Judge Sam C. Blair. Plans are in the formative stage for the citizen's group to expand into a statewide organization.

For the second consecutive year, the Doctors' Medical Foundation, St. Louis County, is the beneficiary of the 1954 Bridle Spur Hunt horse show.

At the first meeting of the Boone County Medical Society under the presidency of **James C. Cope**, M.D., two Columbia physicians were elected to membership in the Society. The two are **A. McChesney Evans**, M.D., and **C. C. Reynolds**, M.D.

A native of Forsythe, Missouri, **G. T. Stewart**, M.D., has opened offices in Memorial Hospital, Mountain View.

The new Children's Hospital, Poplar Bluff, opened early in the year. The new structure, housing thirty beds, is an addition to Doctors Hospital, jointly owned by Doctors **A. D. Markel, Fred J. Biggs, Jr.**, and **Fred L. Kneibert.** The medical director of the new section is **A. C. Parker**, M.D.

The Buchanan County Medical Society held their first meeting of the year at Clarkie's New Edgewood. At the meeting they heard "Problems Facing Missouri's Doctors Today" discussed by **Donald M. Dowell**, M.D., Chillicothe, and Executive Secretary, Tom R. O'Brien, St. Louis.

Starting early this spring, Kansas City Trinity Lutheran Hospital is launching their $1.2 million building program.

Two Washington University staff members spoke at The Association for Research in Ophthalmology at their meeting in Chicago. The speakers were Drs. **Claude Trapp** and **Paul W. Miles**, both of St. Louis.

St. Louis A.G.P. members heard Dr. **Philip Thorek** of Chicago speak on "Pancreatic Diseases and the General Practitioner."

Are You Getting...
Full Measure
WEIR

FALSE bottoms in bottles or short bushels in baskets are carefully avoided by a buying public. Harder to judge, however, is a full measure for money spent in prepayment protection. Frills and window dressing may flash their appeal in catch phrases, designed to persuade the buyer he is getting a panacea for his ailing budget. But when it comes to the test of an actual case, he finds that frills don't pay bills. Suggest to your patients that they check carefully on their coverage to be sure of their benefits. And **you** can be sure that in recommending your non-profit BLUE CROSS and BLUE SHIELD Plans to patients, you're providing them with a full measure of protection.

BLUE CROSS
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Non-profit hospital-medical-surgical plans sponsored by doctors

Kansas City
Saint Louis

The Grand River Medical Society at Chillicothe heard **Maxwell G. Berry**, M.D., Kansas City, speak on "The Basic Principles of Electrocardiography," and **Hector W. Benoit**, M.D., on "Suppurative Disease of the Lungs."

Philip Kaul, M.D., Kansas City, spoke to the Southwest Optimist Club twice in midwinter on "General Concepts of Heart Disease."

Sponsored by Rockhurst College, Kansas City, Jackson County physicians and their wives attended a dinner at which they heard Father John C. Ford of Weston, Massachusetts, speak on "Scientific Approach to Alcoholism."

Kansas City physician **Hubert M. Parker**, M.D., has been selected to represent the Jackson County Medical Society in a community effort to survey the disabled or handicapped local citizens.

The Kansas City-Jackson County chapter of the American Cancer Society chose a new president, D. W. Newcomer III. Attendants at the meeting heard Dr. **W. Clarke Wescoe**, Dean of K. U. School of Medicine, speak. Medical directors of the organization were **E. Kip Robinson**, M.D., **C. Edgar Virden**, M.D., and **David S. Dann**, M.D.

"For twenty years of devoted service to the sick and for administrative guidance" the Sisters of Charity of St. Vincent's Hospital, St. Louis, honored **Paul E. Kubitschek,** M.D., medical director of the hospital. Dr. Kubitschek was Instructor in Clinical Child Psychiatry and Pediatrics at Washington University School of Medicine.

Well worth the reading time is the current series of ads in national magazines sponsored by Parke, Davis & Company on advice to the layman for obtaining the best medical care.

Military officials have indicated that construction of the hospital at the Sedalia A.F.B. at Knob Noster, will start shortly. The base hospital and shops will cost approximately $1.3 million.

John J. O'Hearne, M.D., Kansas City, head of the new Psychiatric Receiving Center of General Hospital, spoke to the Pilot's Club in that city.

The State Association of Medical Record Librarians held their annual conference in St. Louis in mid-winter. Elected president, Esther De Bord, St. Joseph; president-elect, Marjorie Boulton, St. Louis; vice-president, Genevieve Shannon, St. Louis; treasurer, Lydia Petrich, Kansas City; secretary, Gertrude Cunningham, St. Joseph.

A new face in the medical journal field is the "Kansas City General Hospital Medical Bulletin." Number one, under the editorship of Doctors **John Weaver** and **Max Musgrave**, made its appearance at the turn of the year.

The Kansas City chapter of the Arthritis and Rheumatism Foundation presented a lecture and symposium featuring **Philip H. Hench**, M.D., of the Mayo Foundation. Dr. Hench who developed cortisone, recipient of the Nobel Prize, spoke on "Use of the Cortisones and Corticotropines in the Treatment of Rheumatoid Arthritis."

MoMedics attending the Fiftieth Annual Congress on Medical Education and Licensure in Chicago were **Robert A. Moore**, M.D., St. Louis; **William J. Shaw**, M.D., Fayette, and **Roscoe Pullen**, M.D., Columbia.

The Pettis County Medical Society held their annual holiday party at the Sedalia Country Club.

Opening with a social hour as the guests of Squibb and Company, the Henry-Pettis-Saline Medical Society meeting was held at Bothwell Hospital late in January. Speakers were Dr. **Charlotte Wells**, who spoke on speech defects, and Dr. **Harry Stauffer**, on eye problems in children. Attending members received two hours credit toward Grade A Postgraduate Courses, according to the MAGP.

Kansas City psychiatrist **B. Landis Elliott**, M.D., has announced his association with **N. V. Bolin**, M.D.

The new Clay County Health Center, created by a special election last summer, opened its quarters in the First National Bank Building at Liberty.

In Indianapolis the chairmen of the Committees on Hospitals met to discuss with the Indiana Academy of General Practice the requirements for general practitioners in hospitals. Attending the meeting from Missouri were Doctors **Charles E. Martin** and **R. C. McElvain.**

Members of the general practice Marian Hospital, St. Louis, held a dinner-dance after the first of the year at the Missouri Athletic Club.

An appealing booklet "Feel Fit as a Fiddle after Forty" by Don Herold, made available by the Charles E. Knox Gelatine Company, is currently available. The booklet should be of interest to members of the medical profession as well as laymen.

Members of the Committee on Trauma of the American College of Surgeons met in St. Louis at the end of January. St. Louis physicians, **Oscar P. Hampton, Jr.**, M.D. and **James Barrett Brown**, M.D., were hosts to the annual meeting held in the auditorium at the new Wohl Hospital.

At the American College of Surgeons in Omaha, beginning March 1, MoMedics are much in evidence among the members presenting papers. In the Section on General Surgery are **Eugene M. Bricker**, M.D., **Frank McDowell**, M.D., **Carl A. Moyer**, M.D., **Evarts A. Graham**, M.D., **Franklin E. Walton**, M.D., all of St. Louis; from Kansas City, **Kenneth E. Cox**, M.D., **Harold L. Gainey**, M.D., **Hugh G. Hamilton**, M.D., in the Obstetrics and Gynecology sessions. Others appearing on the program in their respective fields are **John H. Mayer**, M.D., Kansas City; **Justin Cordonnier**, M.D., **Grayson Carroll**, M.D., and **Fred C. Reynolds**, M.D., all of St. Louis.

Kansas City Chamber of Commerce appointments to the Membership Committee include **George V. Feist**, M.D., and **Arthur B. Rhoades**, M.D.

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Noteworthy for its ***SAFETY***

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A selective alkaloidal extract (alkavervir fraction) of Veratrum viride, Veriloid presents these noteworthy features when a potent hypotensive agent is indicated. Its dosage forms provide notable flexibility in treatment.

- ●Biologic assay—based on actual blood pressure reduction in mammals—assures uniform potency and constant pharmacologic action.
- ●Blood pressure is lowered by centrally mediated action; there is no ganglionic or adrenergic blocking.
- ●Therapy is rarely, if ever, fraught with the danger of postural hypotension.
- ●Hypotensive action is independent of alterations in heart rate.
- ●Cardiac output is not reduced.
- ●Renal function, unless previously grossly reduced, is not compromised.
- ●Cerebral blood flow is not decreased.
- ● Cardiac work is not increased, tachycardia is not engendered.
- ●No dangerous toxic effects from oral administration, no deaths attributable to Veriloid have ever een reported. Side actions of sia- rrhea, substernal burning, brady- rdia, nausea, and vomiting (due overdosage) are readily overcome and thereafter avoided by dosage adjustment.
- ●In broad use over five years, literally in hundreds of thousands of patients, no other sequelae have been reported, whether Veriloid is given orally or parenterally.
- ●Tolerance or idiosyncrasy rarely develops; allergic reactions have not been encountered. Hence tablets Veriloid can be given for the long course of treatment required in severe hypertension.
- ●Continuing therapy with Veriloid has not led to interference with appetite or with excretory function.
- ●Because of its rapidly induced, prolonged action (6 to 8 hours), tablets Veriloid provide around-the-clock hypotensive effect from 4 doses daily, make today's dosage effective today, and usually prevent hypertensive "spiking" during the night.
- ●A notable safety factor in intravenous administration is: *the extent to which blood pressure is lowered is directly within the control of the physician.*

Tablets

Slow-dissolving, scored tablets in 2 mg. and 3 mg. potencies; produce gratifying response in many patients with moderate to severe hypertension; in fully 30% of patients this response can be maintained for long periods;[1] combination with other hypotensive agents greatly increases this percentage.[2] Initially, 9 mg. daily, in divided doses, not less than 4 hours apart, preferably after meals. Dosage to be increased gradually, by small increments, till maximum tolerated dose is reached. Maintenance dose, 9 to 24 mg. daily.

Solution Intravenous

For immediate reduction of critically elevated blood pressure in hypertensive emergencies such as hypertensive states accompanying cerebral vascular disease, hypertensive crisis (encephalopathy), toxemias of pregnancy; lowers blood pressure promptly, to any degree the physician desires, and with notable safety, since excessive hypotensive and bradycardic effects are readily overcome by simple means. Supplied in a combination package containing one 5 cc. ampul and a 20 cc. vial of diluent, and in boxes of six 5 cc. ampuls. Solution contains 0.4 mg. Veriloid per cc.

Solution Intramuscular

For maintenance of blood pressure in such critical instances, and for primary use in less critical situations not showing the same immediate urgency. Provides 1.0 mg. Veriloid per cc. in isotonic aqueous solution incorporating one per cent procaine hydrochloride. A single dose lowers blood pressure significantly, reaching maximum hypotensive effect in 60 to 90 minutes. By repeated injections (every 3 to 6 hours) blood pressure may be kept depressed for hours or days if necessary. In boxes of six 2 cc. ampuls. Complete instructions (dosage and administration) with every ampul of the parenteral preparations should be noted carefully.

1. Kauntze, R., and Trounce, J.: Treatment of Arterial Hypertension with Veriloid (Veratrum Viride), Lancet *2*:1002 (Dec. 1) 1951.
2. Wilkins, R.W.: Combination of Drugs in the Treatment of Essential Hypertension, Mississippi Doctor *30*:359 (Apr.) 1953.

ORIGINAL RESEARCH PRODUCTS OF

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J. Earle Donaldson, M.D., Kansas City, suffered a fracture of the left hip in a fall over the holiday season.

One of the last public appearances of Alexander B. Sinclair, Sr., father of **A. B. Sinclair, Jr.**, M.D., Kansas City, was his annual appearance at Children's Mercy Hospital as Santa Claus.

The Sangamon County Medical Society, Springfield, Illinois, heard **Robert Elman**, M.D., St. Louis, speak on "Chronic Recurrent Pancreatitis."

An incubator for the Independence Sanitarium nursery, valued at nearly a thousand dollars, was presented by the Mothers Club of Independence.

Following the recommendations of **Will R. Eubank**, M.D., and **A. N. Altringer**, M.D., Kansas City, the first allocation of funds from the estate of William S. Merritt was approved for EENT equipment at Kansas City General Hospital. This allocation of over three thousand dollars is the first of the $55,000 portion of the estate left to the City for the Clinics.

Logging 65,649 miles while making 12,664 calls, Kansas City ambulance drivers turned in the first perfect non-accident record in more than twenty-five years. The fifteen drivers for Kansas City General Hospital stated that the record was set in spite of other drivers, of whom about one out of fifteen yields the right of way on hearing a siren.

The century-old Harris home, Kansas City, was the subject of a holiday feature article in the *Kansas City Star.* The building, still largely preserved, is currently occupied by **M. B. Casebolt**, M.D., Kansas City.

The University of Kansas City School of Law has started a fifteen session course in Legal Relations of Professional Scientific Personnel. The course, taught by Elwyn L. Cady, Jr., has been approved for P.G. credit by the AAGP.

The National Foundation for Infantile Paralysis has announced three grants for research, all to Washington University, St. Louis. The grants, in virus research, $20,250 under the direction of Dr. Eli Robins and $10,950 under the direction of Carl F. Cori; in the field of therapeutics, $9,991 to Dr. **James L. O'Leary**, Professor of Neurology.

Greene County Medical Society officers were installed at the annual dinner on February 1. The new president is **Durward G. Hall**, M.D., president elect **E. H. Rainwater**, M.D., secretary **Charles Lockhart**, M.D., and **Don Gose**, M.D., treasurer. The dinner meeting was held at Hickory Hills Country Club.

Under the editorship of **J. H. Trolinger**, M.D., the *Cape County Journal* appeared in an entirely revised form the first of the year. The better than average journal has been completely revised in format, typography and cover.

Harold Rapp, M.D., is now associated with Cape Girardeau radiologist, **Milton Shoss**, M.D.

At the Chicago Medical Society's Annual Clinical Conference, March 2-5, several MoMedics are scheduled to speak: from Kansas City, **Ferdinand C. Helwig**, M.D., and from St. Louis, **Harry L. Alexander**, M.D., **Robert Elman**, M.D., and **Bernard Becker**, M.D.

The principal speaker at the annual meeting of the Family Service Association was **Louis H. Forman**, M.D., Kansas City.

Webster Groves physician, **W. A. Smith**, M.D., has announced his retirement from medical practice and has moved to Yuma, Arizona.

John H. Platz, M.D., Carrollton, was elected president of the Grand River Medical Society at their meeting in Chillicothe. Dr. Platz will head the third largest medical organization in the state.

Hannibal physician, **Richard M. Strong**, M.D., has been notified of his certification by the American Board of Surgery. He is associated with **Francis E. Sultzman**, M.D., in that city.

At the first meeting of the Community Blood Bank board of directors, **Carroll P. Hungate**, M.D., Kansas City, was elected president. Temporarily the Bank will occupy space in the former National Defense Blood center at Red Cross headquarters. Technical advisers to the Bank are Kansas City Pathologists **Ferd C. Hellwig, H. K. B. Allebach, Victor Buhler, Hilliard Cohen** and **Russell W. Kerr.**

The fifth annual International Group of Doctors in Alcoholic Anonymous will meet at the Mayflower Hotel, Akron, Ohio, May 14, 15 and 16. For information and reservations address: Doctors, Mayflower Hotel, Akron, Ohio.

Francis Dean, M.D., Fayette, has been made a partner in the Lee Hospital. The other partners are **W. A. Bloom**, M.D., **W. J. Shaw**, M.D., and **M. L. Leech**, M.D.

Staff officers were reelected at the annual meeting of the Medical Staff of St. John's Hospital, St. Louis, on January 13 at which **Alphonse McMahon**, M.D., Chief of Staff, presided. Officers reelected were: **Grayson Carroll**, M.D., associate chief of staff; **John V. King**, M.D., secretary-treasurer; **Matthew W. Weis**, councilor for a two year term; **Charles R. Doyle**, M.D., medical education director. **Edward Bowdern**, M.D., continues as councilor. Committee chairmen announced at the meeting were: **John J. Hammond**, M.D., resident staff; **Alphonse J. Raemdonck**, M.D., outpatient department; **E. Lawrence Keyes**, M.D., medical records; **Matthew W. Weis**, M.D., medical library; **Maurice B. Roche**, M.D., house and equipment; **O. P. J. Falk**, M.D., school of nursing; **Hollis N. Allen** M.D., program.

The Missouri Society of X-ray Technicians will hold its twenty-second annual convention on March 26 and 27, 1954, at the Statler Hotel, St. Louis. An educational program and interesting exhibits have been prepared as well as worthwhile entertainment. Members and nonmembers are cordially invited to attend and participate.

The Thompson, Brumm & Knepper Clinic, St. Joseph, announce that the fifth annual **Dr. F. G. Thompson**, Sr., Lectureship will be presented by Robert M. Moore, M.D., Professor of Surgery, University of Texas, on May 20 at 8:00 p.m. The subject will be "The Story of an Operation (Gastrectomy)" and will be given at the Clinic Building.

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IN MEMORIAM

Frankenthal, Maurice A., M.D., St. Louis, a graduate of Johns Hopkins University School of Medicine, 1902; honor member of the St. Louis Medical Society; aged 75; died December 5.

Hurford, Phelps G., M.D., St. Louis, a graduate of Washington University School of Medicine, 1908; honor member of St. Louis Medical Society; aged 77; died December 13.

Proctor, Carter A., M.D., Sullivan, a graduate of Washington University School of Medicine, 1912; member of the Franklin-Gasconade-Warren County Medical Society; aged 65; died December 29.

Bohrer, E. Claude, M.D., West Plains, a graduate of the Washington University School of Medicine, 1922; President of the Missouri State Medical Association; member of the South Central Counties Medical Society; aged 62; died January 20. (See pages 184 and 224).

NEW MEMBERS

Anderson, Dwight W., M.D., Moberly
Bachmann, Paul L., M.D., Kansas City
Bolin, N. Venay, M.D., Kansas City
Butcher, Robert W., M.D., Kansas City
DeHovitz, Bernard, M.D., University City
Drake, William L., Jr., M.D., St. Louis
Engleman, Reinhold, M.D., St. Louis
Folck, William P., M.D., Kansas City
Furla, Gus J., M.D., St. Louis
Gallagher, Lionel M., M.D., California
Glaser, Robert J., M.D., St. Louis
Jarvis, William J., M.D., Kansas City
Kettner, Edward G., M.D., Kansas City
Lawrence, Fred E., M.D., Columbia
Miller, Wilson H., M.D., Kansas City
Mosser, Robert S., M.D., Independence
Pullen, Roscoe L., M.D., Columbia
Rawlins, Fred E., M.D., St. Louis
Rice, Carl E., M.D., Hillsboro
Rolufs, Lloyd S., M.D., Kirkwood
Roth, Alexander, M.D., Kansas City
Sodeman, William A., M.D., Columbia
Steele, Jack T., M.D., St. Louis
Sundstrom, Frank D., M.D., Springfield
Williams, William R., Jr., M.D., Kansas City

Myomectomy Satisfactory

. . . If one considers the total number of the myomectomies performed, the number of successful pregnancies following operation is not very encouraging . . . however, it must be said that many other factors, such as male sterility, failure to marry, and the lack of desire for children no doubt contribute greatly to the poor showing. At least the uterus was preserved for its proper function.

. . . These facts seem to indicate that one may expect a serviceable uterus for at least five years after enucleation of fibromas from the myometrium.

It is my opinion that the uterus after myomectomy is capable of carrying on its normal physiologic function if other factors associated with fertility are normal.—Grey Jones, M.D., St. Louis, *J. International College of Surgeons.*

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April 1-2, 1954

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GUEST SPEAKERS

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Professor, Clinical Obstetrics and Gynecology,
Washington University, St. Louis, Missouri

Louis H. Clerf, M.D.
Professor, Laryngology and Broncho-Esophagology,
Jefferson Medical College
Philadelphia, Pennsylvania

Warren H. Cole, M.D.
Head, Dept. of Surgery,
Illinois College of Medicine,
Chicago, Illinois

Hugh F. Hare, M.D.
Los Angeles Tumor Institute
Los Angeles, California

N. L. Higinbotham, M.D.
Associate Professor of Surgery,
New York Medical College,
New York, New York

Richard H. Overholt, M.D.
Staff Member, Overholt Thoracic Clinic,
New England Deaconess Hospital,
Brookline, Massachusetts

Cornelius P. Rhoads, M.D.
Director, Memorial Hospital
New York, New York

Arthur P. Stout, M.D.
Professor, Pathology,
Columbia University,
New York, New York

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American Cancer Society, Kansas Division—The Kansas Medical Society

WHEN SYMPTOMS ARE DISTRESSING BUT DISGUISED . . .

"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The January meeting of the Grand River Medical Society and its Woman's Auxiliary was held at the Strand Hotel, Chillicothe, Thursday night, January 14.

Following a delightful dinner, Dr. **Max G. Berry**, Kansas City, and Dr. **Hector B. Benoit, Jr.**, Kansas City, presented the scientific program of the evening. Dr. Berry spoke on "The Basic Principles of Electrocardiography," and Dr. Benoit discussed "Suppurative Disease of the Lungs." This program was presented under the auspices of the Missouri Academy of General Practice and provides formal credit for Academy members.

E. A. DUFFY, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Lincoln-St. Charles County Medical Society

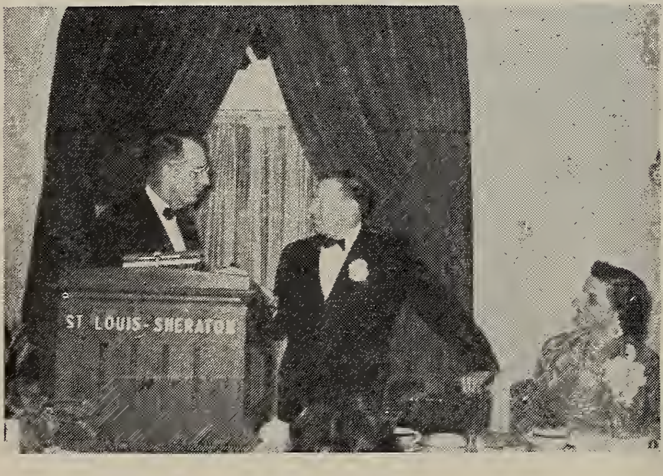
A panel discussion on "Newer Drugs in the Management of Hypertension," by **C. G. Vournas**, M.D., **Charles Kromer**, M.D., and **Max Franklin**, M.D., all of St. Louis University Medical School, was presented at a meeting of the Lincoln-St. Charles County Medical Society at the Southern Air, Wentzville, Thursday evening, January 21.

Eighteen physicians were present to break bread together and hear this informative panel. This was presented as a cooperative endeavor of the Missouri Academy of General Practice and St. Louis University Medical School. Considerable discussion by the group followed the formal presentation by the panel.

JOSEPH C. CREECH, M.D., *Secretary*

St. Louis County Medical Society

The annual Installation Dinner of the St. Louis County Medical Society was held at the Sheraton Hotel, St. Louis, Wednesday night, January 13. The evening festivities began with a social hour at which just the right spirit was developed for the rest of the evening's activities. An excellent dinner was served and enjoyed to the accompaniment of an appropriate orchestra. The proper color and tone was given to the meeting by the good number of ladies present.



Dr. Guy Magness presents gavel to Dr. M. A. Diehr, incoming president.

Dr. Guy N. Magness, the retiring president, introduced the officers of the society and guests and then gave a brief summary of the Society's activities for the year just past. He then turned over the gavel to the new president, **Dr. M. A. Diehr.** Dr. Diehr gave an appropriate acceptance speech which was concluded with the announcement of various committee appointments for the year 1954.

ROY A. WALTHER, JR., M.D., *Secretary*

Jefferson County Medical Society

The Jefferson County Medical Society held its January meeting at the Health Center in Hillsboro, Friday night, January 29. Dr. **David Goldring** of St. Louis, presented the program for the evening. He spoke on "Rheumatic Fever."

J. F. RUTLEDGE, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

The third session in a series of five evening postgraduate medical meetings was held in McAlester Hall at the University of Missouri, Thursday night, January 28. These meetings are sponsored jointly by the Medical School of the University and the Missouri Academy of General Practice. Physicians within a radius of fifty miles of Columbia have been receiving invitations to the sessions. Academy members received formal postgraduate credit from their attendance.

The program on January 28 presented a symposium on "Cancer" by Drs. **Henry Schwarz II, John Tinsley** and **Richard E. Johnson,** all of the staff of the Ellis Fischel State Cancer Hospital.

J. L. WASHBURN, M.D., *Councilor*

Cooper County Medical Society

The Cooper County Medical Society met at the St. Joseph Hospital, Boonville, Monday evening, Jan-

Meeting of January 18.

uary 18, with Dr. **W. E. Stone**, President, presiding.

Dr. **J. Loren Washburn**, Versailles, Councilor of the Fifth District, was introduced and asked to present the matter for the evening's discussion. Dr. Washburn spoke briefly regarding the survey of Medical Indigency being made under the auspices of the Missouri Health Council and explained that Cooper County had been selected for pilot study. He then introduced Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association and Dr. **A. E. Spelman**, Smithville, Chairman of the Rural Health Committee of the State Medical Association, both of whom discussed important points concerning the survey.

Dr. Robert McNamara, Department of Rural Sociology of the University of Missouri, and Chairman of the Missouri Health Council, spoke briefly and then called on Mr. Mark Hale of the University of Missouri who is in charge of the actual survey under the direction of the Institution of Research at the University of Missouri. Mr. Hale discussed in detail the part that physicians in private practice will be called upon to play in the study. At the close of the discussion, the society voted unanimously to give its full cooperation to the study. The final item of business at the meeting was the election of officers for the year 1954.

J. C. TINCHER, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Joint Meeting of Henry, Johnson, Pettis and Saline County Medical Societies

Amidst snow and freezing cold, twenty-eight doctors attended an evening dinner meeting of the Henry, Johnson, Pettis and Saline County Medical Societies at the Bothwell Hospital, Sedalia, Wednesday night, January 20. The evening's festivities began with a social hour followed by dinner and then the scientific program.

Charlotte Wells, Ph.D., Director of the Speech and Hearing Clinic, University of Missouri, Columbia, gave an interesting discussion on "The Correction of Speech Defects."

John McLeod, M.D., Kansas City, Department of Ophthalmology, University of Kansas Medical School, spoke on "Common Eye Defects in Children."

This entire program was interesting and informative and was sponsored by the Missouri Academy of General Practice.

RAY HOLLINGSWORTH, M.D., *Chairman for the Meeting*

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society and its Woman's Auxiliary was held at the Mitchell Hotel, Nevada, on Thursday night, January 14, with forty-one in attendance. The evening affair began with a social hour featuring the generosity of the local druggist. This was followed by a smorgasbord dinner and the program.

The speakers for the evening were Mr. Boyd Ewing, Attorney, President of Vernon County Bar Association, and Mr. Douglas Hudson, Attorney, Fort Scott, Kansas, Past President, Kansas State Bar Association, and member of the House of Delegates of the American Bar Association. Mr. Ewing discussed "Legal Pitfalls in the Practice of Medicine" while Mr. Hudson spoke on "The Doctor as a Witness." These were both excellent presentations. Again we were fortunate in having this program sponsored by the Academy of General Practice.

O. B. BARGER, M.D., *Secretary*

Lafayette-Ray County Medical Society

The January meeting of the Lafayette-Ray County Medical Society and its Woman's Auxiliary was held at Lexington, on Tuesday night, January 12, with twenty in attendance.

Meeting of January 12.

Following dinner the ladies held a separate meeting while the doctors were privileged to hear Dr. **Donald M. Dowell**, Chillicothe, discuss a number of important matters concerning the medical profession in this state. Guests attending the meeting in addition to Dr. Dowell were Dr. **John Martin**, Chillicothe, and Ray McIntyre, Field Secretary of the State Association.

M. C. JOHNSON, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

The Ozarks Medical Society and its Woman's Auxiliary held an evening dinner meeting at the American Legion Memorial Hall in Monett, January 12.

The scientific program for the evening, under the auspices of the Missouri Academy of General Practice, was as follows: **Hugh E. Stevenson, Jr.**, M.D., Assistant Professor Surgery, University of Missouri School of Medicine, Columbia, "The Acute Abdomen in Children," **Wm. A. Sodeman**, M.D., Professor of Medicine, University of Missouri School of Medicine, Columbia, "Some Problems in Antibiotic Therapy." These discussions were informative and much enjoyed by all.

C. A. SPEARS, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

The Society met at the Pine Room, Greyhound Bus Station, Rolla, for a dinner meeting, Thursday night, January 28. The doctor's wives were present to add much to the glamor of the meeting.

The scientific program, given under the auspices of the Missouri Academy of General Practice, presented **John Herweg**, M.D., Assistant Professor of Pediatrics, Washington University Medical School, St. Louis, who spoke on "Upper Respiratory Diseases in Children."

The attendance at the session was twenty-five.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

We, the members of the South Central Counties Medical Society of the Missouri State Medical Association, are sorrowfully assembled this evening that we may endeavor to express in a measure our appreciation of the life and character of our fellow, Dr. **E. Claude Bohrer**, who died only this morning. Accustomed as we are to having close contact with human life from its joyous birth on through its vicissitudes to the apparent tragedy of death, yet we are appalled when we again face this grim mystery.

We well know that change and decay is the law of God, but that no energy is lost forever in God's universe. We realize that death is only a change from one life to another; we are content therefore to serve and die without a question why, buoyed by Hope and led by "Kindly Light." Our sorrow, therefore, is not caused by any pity for our brother who feared not the change, which came to him as he desired it should, when in the full vigor of his active life and not by slow decay.

We grieve because of our great loss in his genial companionship and for the loss of his helpful service. We do sympathize most sincerely with his sorrowing family, with his multitude of friends and with his grateful patients.

It is not with stilted resolutions of respect or with fulsome words of praise we would memorialize him, but we would testify in simplicity and with humility to his sterling character. Our medical profession is indeed proud of him for his stalwart manhood; we honor him for his exemplary life; we praise him for his fidelity and his friendly culture. He has not only honored himself, but his profession more, by maintaining our high ideals and the splendid ethical standards which so distinguish our profession. Truly he measured up to an ideal of character and service.

Service, that embracing word; service he rendered without thought of reward other than the joy experienced in doing. He realized that the purest and most exquisite pleasure was experienced when serving successfully his fellow beings. All who knew him loved him—a stalwart patriot, a public spirited citizen, a loving father and husband, a loyal friend, a skillful physician, a genial Christian gentleman.

The preceding resolutions regarding Dr. E. Claude Bohrer were read and adopted at the meeting of the South Central Counties Medical Society in West Plains, on January 20, 1954. Copies of these resolutions are to be mailed to the family, recorded in the minutes of our medical society, and a copy sent to our State Association as well as a copy being released to our local newspaper.

Rollin H. Smith, M.D., *Acting Secretary*

TENTH COUNCILOR DISTRICT

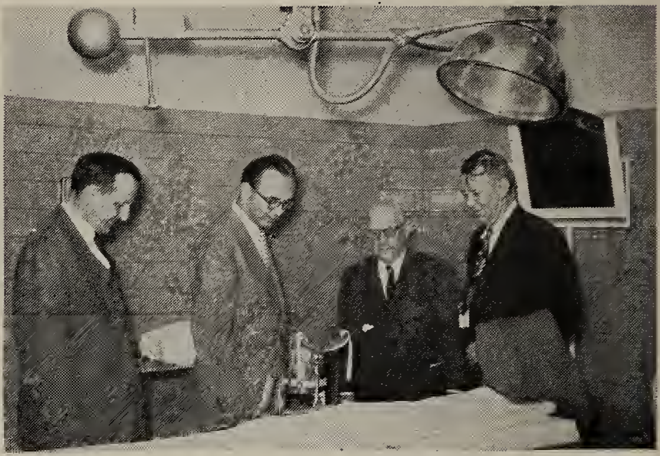
FRANK W. HALL, CAPE GIRARDEAU, COUNCILOR

Dunklin County Medical Society

A joint meeting of the Dunklin, Pemiscot and Butler-Ripley-Wayne County Medical Societies was held at the Dunklin County Memorial Hospital in Kennett, Thursday night, January 28.

The program was furnished by the Missouri Academy of General Practice as follows: **Wm. Macdonald**, M.D., St. Louis, spoke on "The Medical Management of Colitis"; **B. L. Sinner**, M.D., St. Louis, discussed "The Diagnosis of Lesions of the Colon Through the Sigmoidoscope."

Meeting of January 28.



Informal inspection of hospital following meeting.

Twenty-one physicians attended this interested session.

E. L. Spence, M.D., *Secretary*

Mineral Area County Medical Society

Seventeen physicians attended the meeting of the Mineral Area Society at the State Hospital, Farmington, Thursday night, January 28. Invitations were also extended to all members of Jefferson and Perry County Societies.

The program for the evening was jointly sponsored by St. Louis University Medical School and the Missouri Academy of General Practice. It consisted of a panel discussion on "Newer Drugs in the Management of Hypertension" by **Robert Potashnick**, M.D., **John J. Inkley**, M.D., and **William Abrams**, M.D., all of St. Louis.

Jack Mullen, M.D., *Secretary*

SEMO County Medical Society

A meeting of the SEMO County Medical Society was held Wednesday night, January 20, at the Delta Community Hospital in Sikeston.

The program for the evening was furnished by the Missouri Academy of General Practice and presented **Robert J. Mueller**, M.D., St. Louis, who spoke on "The Psychoneuroses in General Practice and Their Management," and **James F. Dowd**, M.D., St. Louis, who discussed "Treatment of Common Facial Injuries Resulting From Automobile Accidents." Despite inclement weather twenty physicians were present to enjoy this valuable program.

Wm. C. Critchlow, M.D., *Secretary*

AMERICAN COLLEGE OF CHEST PHYSICIANS

The Missouri Chapter of the American College of Chest Physicians and the Missouri Trudeau Society will present a program on April 4, at the Statler Hotel, beginning with a luncheon at 12:30 p.m. The program will consist of the following presentations:

"Miliary Lesions in the Lung," Sydney Jacobs, M.D., Tulane University School of Medicine, New Orleans.

"Pediatric Chest Conditions," James King, M.D., St. Louis University School of Medicine, St. Louis.

"Pneumoconiosis," John Wyatt, M.D., St. Louis University School of Medicine, St. Louis.

"X-Ray Conference," Hyman Senturia, M.D., St. Louis Jewish Hospital, moderator.

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William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
James A. Alston, M.D.

Waldo W. Buss, *Executive Director*

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MISSOURI STATE MEDICAL ASSOCIATION

The 96th Annual Session of the Missouri State Medical Association will be held in the Jefferson Hotel, St. Louis, April 4, 5, 6 and 7, 1954.

TIME AND PLACE OF MEETINGS

Sunday, April 4

9:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
10:30 a.m. House of Delegates, Crystal Room, Hotel Jefferson.
1:00 p.m. Intermission for lunch.
2:00 p.m. House of Delegates, Crystal Room.
3:30 p.m. Reference Committee meetings scheduled hourly.

Monday, April 5

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Sections, Crystal and Gold Rooms.
12:00 noon. Round Table Luncheon, Gold Room.
1:30 p.m. Motion pictures, Crystal Room.
2:00 p.m. Scientific Session, Crystal Room.
3:30 p.m. Intermission to View Exhibits.
4:00 p.m. House of Delegates, Crystal Room.
6:00 p.m. Fraternity and Alumni dinners and meetings.

Tuesday, April 6

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion Pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Sections, Crystal and Gold Rooms.
12:00 noon. Round Table Luncheon, Gold Room.
2:45 p.m. Wet Clinics, Washington University School of Medicine and St. Louis University School of Medicine.
7:30 p.m. Annual Banquet, Gold Room. Rev. Paul C. Reinert, S.J., President, St. Louis University, Speaker.

Wednesday, April 7

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Session, Crystal Room.
12:00 noon. Intermission to View Exhibits and lunch.
1:30 p.m. House of Delegates, Crystal Room.

SCIENTIFIC PROGRAM

Monday, April 5, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Present Status of Cardiac Arrest and Resuscitation, Hugh E. Stephenson, Jr., M.D., Columbia.

Regardless of the type of patients one sees in his practice, sooner or later the physician will be faced with the necessity to resuscitate an acutely arrested heart. Unless one is aware of the pitfalls, precautions and complications likely to be encountered, this golden opportunity may be lost. This discussion will attempt to bring to attention the factors necessary for successful resuscitation . . . as well as a brief review of the present status of cardiac arrest from an etiologic and preventive aspect.

9:20 a.m. Discussion: C. Rollins Hanlon, M.D., St. Louis.
R. A. Ritter, M.D., Cape Girardeau.

9:30 a.m. Intervertebral Disks, George E. Roulhac, M.D.; J. Albert Key, M.D., and A. B. Jones, M.D., St. Louis, Panelists.
Moderator: Ralph A. Kinsella, M.D., St. Louis.

10:00 a.m. Intermission to View Exhibits.

Section on Medicine, Crystal Room, Hotel Jefferson

10:30 a.m. Renal Complications in Diabetes, Max Miller, M.D., Cleveland.

In 1936 Kimmelstiel and Wilson first described a distinctive lesion of the renal glomeruli which they associated with a clinical syndrome of diabetes, hypertension, and a nephrotic syndrome. Since then the work has been confirmed by many investigators, the majority agreeing upon the specificity of the lesion. In recent years, careful studies have shown that the lesion is really the result of profound focal thickening and hyalinization of the capillary loops, or their basement membranes. The name "intercapillary," therefore, is a misnomer. The glomerular lesions are of two distinct types, nodular and diffuse. The nodular hyaline lesion is a spherical shape and occupies the center of a glomerular lobule, varying in diameter from 20 to more than 100 microns. The second lesion consists of focal fibrosis of the majority of glomeruli without spherical hyaline masses.

The nodular lesions are almost pathognomonic of diabetes, according to Bell and Laipply. The latter has also emphasized the specificity of glomerular focal fibrosis for the diagnosis of diabetes pathologically. The focal fibrosis is present in nearly all the glomeruli in approximately equal degree in diabetes, as contrasted with the variation in degree and the presence of many normal glomeruli in nephrosclerosis, pyelonephritis and glomerulonephritis. These lesions occur in from 30 to 60 per cent of diabetic subjects, predominantly in the older age group. Except for the study of Horn and Smetana all writers are agreed that it is present only rarely in other conditions.

Since the number of patients who have had diabetes fifteen years or longer is constantly increasing, particularly in the younger group, it is certain that this renal complication will take its place with cardiovascular disease as a major cause of death in diabetes.

Other types of renal lesions which frequently complicate diabetes will be discussed also.

11:00 a.m. The Diagnosis of Pancreatic Disease, R. O. Muether, M.D., St. Louis.

11:20 a.m. Discussion: Wilson J. Ferguson, M.D., Sikeston.
Harry L. Greene, Hannibal.

11:30 a.m. Subacute Bacterial Endocarditis, Earl L. Loyd, M.D., Jefferson City.

This paper will discuss in some detail the etiology and the pathology of subacute bacterial endocarditis as well as the clinical and laboratory features of the disease. The basic understanding of this condition is essential for proper application of current therapeutic methods. The paper will include a discussion on the use of combinations of various antibiotic drugs and will make comments on the reasons for treatment failures. Mention will also be made of prophylactic measures in the prevention of subacute bacterial endocarditis.

11:50 a.m. Discussion: Joseph C. Edwards, M.D., St. Louis.
John J. Hammond, M.D., St. Louis.

Section on Obstetrics, Gold Room, Hotel Jefferson

10:30 a.m. Toxemias of Pregnancy, Conrad S. Collins, M.D., New Orleans.

The utilization of tracheotomy in many medical and neurologic conditions and its value in these states has been well defined. As many patients with eclampsia succumb to cerebral lesions, it was decided to utilize tracheotomy in those cases failing to respond to the usual regimen or who showed marked obstruction of the tracheobronchial tree. The results achieved in approximately twenty-eight cases is presented.

11:00 a.m. Committee on Maternal Welfare Report, H. C. Wasserman, M.D., St. Louis.

11:20 a.m. Discussion: Matthew W. Weis, M.D., St. Louis.
James E. Keeler, M.D., Kansas City.

11:30 a.m. Bleeding States of Pregnancy Associated With Placental Abnormalities, Harold L. Gainey, M.D., and Kenneth S. Nicolay, M.D., Kansas City.

In this discussion, emphasis will be placed upon the placental anomaly of circumvallation of the placenta, and the placental accident, rupture of the marginal sinus, in an attempt to establish a clinical differentiation in the symptomatology, so that the management of these problems may be differentiated from placenta previa and abruption of the placenta.

11:50 a.m. Discussion: George Wulff, Jr., M.D., St. Louis.
Joseph L. Johnston, M.D., Springfield.

12:00 noon. Round Table Luncheon, Gold Room, Hotel Jefferson.
Presiding: Daniel L. Sexton, M.D., St. Louis.

General Session, Crystal Room, Hotel Jefferson

1:30 p.m. Motion pictures.

2:00 p.m. Problems in Gallbladder Surgery, Alfred M. Large, M.D., Detroit.

What is the proper treatment for "silent gallstones?"
When should operation be performed for acute cholecystitis?
What are the indications for common bile duct exploration?

An attempt will be made to answer these and certain other questions that frequently arise in the every day management of patients with biliary tract disease.

2:30 p.m. Factors Conditioning the Response of Pneumococcic Pneumonia to Antibiotic Agents, Thomas A. Van Metre, M.D., St. Louis.

2:50 p.m. Discussion: John W. Berry, M.D., St. Louis.
John C. Tinsley, Jr., M.D., Columbia.

3:00 p.m. The Use of Antibiotics in Surgery, W. A. Altemeier, M.D., Cincinnati.

3:30 p.m. Intermission to View Exhibits.

4:00 p.m. House of Delegates.

Tuesday, April 6, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Value of the Smear Technic in the Early Diagnosis of Cancer of the Cervix, Ferdinand C. Helwig, M.D., Kansas City.

The results of more than 2,000 smears for the early detection of cancer of the cervix, obtained from the office of one gynecologist, will be presented. The follow-up by around-the-clock biopsy or cone, often with step or even serial section studies, of the cases with positive smears will be discussed. The stages of hyperestrogenic stimulation, basal cell atypia, *in situ* carcinoma, gland penetration and early stromal invasion will also be outlined. Prognosis in nonclinical cervical cancer as compared with clinical cancer will be brought out. The discussion will be illustrated by the use of colored slides of the normal and pathologic histology and cytology of the uterine cervix.

9:20 a.m. Discussion: J. Milton Singleton, M.D., Kansas City.
Kenneth S. Nicolay, M.D., Kansas City.

9:30 a.m. Studies of Estrogen Therapy in Pregnancy, M. Edward Davis, M.D., Chicago.

10:00 a.m. Intermission to View Exhibits.

Section on Pediatrics, Crystal Room, Hotel Jefferson

10:30 a.m. Febrile Convulsions in Childhood, Gilbert B. Forbes, M.D., Rochester, New York.

The subject of febrile convulsions should be of interest to both general practitioners and pediatricians. The febrile convulsion is the most common neurologic disorder seen in infancy and childhood; parents are alarmed at the occurrence of this violent and frightening chain of events; the physician is concerned with matters of differential diagnosis at the bedside; and all parties concerned must face the question of both immediate and eventual prognosis.

It is proposed to discuss this subject from these points of view and, in addition, to mention those situations in which febrile convulsons are most likely to occur. The age incidence of this "disorder" is of considerable interest. Ideas concerning provocative factors and pathogenesis will be presented and discussed.

11:00 a.m. The Treatment of Purulent Meningitis, John C. Herweg, M.D., St. Louis.

11:20 a.m. Discussion: Eugene J. Schwartz, M.D., Springfield.
Edward Lee Washington, M.D., Columbia.

11:30 a.m. Malignant Tumors in Infancy and Childhood, James P. King, M.D., St. Louis.

This is a discussion of the increasing importance of malignant tumors in infancy and childhood. It will point out the common varieties of tumors that occur in this age group and their presenting clinical pictures.

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Stress will be placed on the diagnostic handling of masses in children. It will include a brief discussion of the chemotherapeutic agents available for the therapy of disseminated malignancies which extend beyond the realms of radiotherapy and surgery, such as the nitrogen mustards, ACTH, cortisone, folic acid antagonists, and 6-mercaptopurine.

11:50 a.m. Discussion: Charles Eckert, M.D., St. Louis.
Durward G. Hall, M.D., Springfield.

Section on Surgery, Gold Room, Hotel Jefferson

10:30 a.m. Diverticulitis, Rudolf J. Noer, M.D., Louisville.

Diverticulosis is variously reported as present in from 5 to 25 per cent of all individuals over 40. The mere presence of colonic diverticulosis is of no great significance. It is only when the diverticuli become inflamed that the patient is subject to the hazards of the complications of diverticulitis.

The most frequent complications are perforation with abscess formation or peritonitis, obstruction and hemorrhage. The hazard to life from perforation of an inflamed diverticulum is greater than many have believed in the past. Medical measures may help in the early stages of the disease, but the truly life-saving value of a proximal colostomy must not be too long delayed. Diversion of the fecal stream will minimize the hazard of perforation and fistula formation. Obstruction not infrequently develops following repeated attacks of acute diverticulitis due to fibrosis of the colonic wall. This obstruction is in itself frequently severe enough to require operative relief. The x-ray appearance may suggest the possibility of malignancy which increases the need for exploration. A resection, of a type proper for carcinoma, should be carried out; nothing will have been lost if histologic studies eventually reveal only diverticulitis and peridiverticulitis, but much is lost if an inadequate resection is carried out when carcinoma is present.

Hemorrhage is a much more frequent complication of diverticulitis than was once believed. During the last year two cases of exsanguinating hemorrhage from diverticulitis, required colonic resection for relief.

Finally, the problem of the patient with repeated incapacitating diverticulitis from a relatively small area of colonic involvement must be considered. The hazard of the complications of diverticulitis is sufficiently great and the attacks sufficiently incapacitating that one should not hesitate to resect the involved area if the balance of the colon remains relatively free, thereby saving the patient the hazard of future complications and assuring him of a much more normal existence.

11:00 a.m. Scars, Prevention and Treatment, David W. Robinson, M.D., Kansas City.

Scars, post-traumatic and postoperative, which, to the laymen, are the visual evidence of the surgeon's skill and which, too often to the surgeon, are quite incidental to his accomplishments in the all important "deep dangerous areas," can be minimized by the surgeon's basic knowledge of wound healing and his careful attention to technical detail. Blood supply of the part, infection, foreign bodies, rest and tissue tension are the essential factors in the locale of the wounds effecting fibrosis but systemic influences relating to age, endocrine balances, race, inheritance and diet are important.

With such knowledge in mind, technical points can be emphasized, e.g., wound toilet, removal of foreign bodies, debridement, minimal use of fine sutures and ligatures, drains, dressings and splints, avoidance of dead space, closure in lines of normal skin tension, time of motion, antibiotics and systemically adequate diet, especially protein and caloric intake, vitamins, fluid, mineral and electrolyte balance. Wounds should be closed carefully layer by layer and known points on the skin should be approximated to avoid "getting lost." A fine subcutaneous or dermal closure will take the tension of the surface skin closure and leave a fine scar.

The removal of scars is never complete but can be quite good by excision and closure. Wherever possible, local adjacent tissue, being of the type desired, gives the best cosmetic results and should be utilized by undermining and shifting. Suture lines should fall into the normal lines of skin tension and should not cross crease lines at right angles. Sometimes a wide defect is best closed by a skin graft, usually the thicker the better. A pedicle flap shift from a distance is usually unnecessary unless much bulk is required or it is necessary to cover vital deeper structures. Hypertrophic scars and keloids should be operated upon only in a stage of resolution so as not to add more scar. Radiation therapy within a few days after surgery may be helpful.

11:20 a.m. Discussion: Herman Neuman, M.D., St. Louis.
James F. Dowd, M.D., St. Louis.

11:30 a.m. Traffic Accidents, Jacob Kulowski, M.D., St. Joseph.

The human ingredients of traffic accidents are well known and have been told almost to the exclusion of what may be termed the inhuman elements involved in traffic injuries and deaths. This discussion will cover some of the most important inhuman or physical factors which contribute to the mounting death toll and injuries on the highways—the death and injury potentials of the car itself will be scrutinized. It is hoped that criticism will yield to some extent at least recommendations which will alleviate this distressing situation.

11:50 a.m. Discussion: Oscar P. Hampton, M.D., St. Louis.
M. David Orrahood, M.D., St. Louis.

12:00 noon. Round Table Luncheon, Gold Room, Hotel Jefferson.
Presiding: Paul O. Hagemann, M.D., St. Louis.

Wet Clinic, Desloge Auditorium, St. Louis University School of Medicine

Presiding: R. O. Muether, M.D., St. Louis.
2:45 p.m. Collagen Disease, Philip A. Tumulty, M.D., St. Louis.

3:30 p.m. Infectious Hepatitis, James W. Colbert, M.D., St. Louis.

4:15 p.m. Peripheral Arterial Disease, Charles R. Doyle, M.D., St. Louis.

Wet Clinic, Wohl Auditorium, Washington University School of Medicine

Presiding: A. N. Arneson, M.D., St. Louis.
2:45 p.m. Chronic Ulcerative Disease of the Lower Extremity, Carl A. Moyer, M.D., St. Louis.

3:30 p.m. The Medical Treatment of Hypertension, Henry A. Schroeder, M.D., St. Louis.

4:15 p.m. Results of Therapy With Radio-active Colloidal Gold in Pelvic Carcinoma, Alfred I. Sherman, M.D., St. Louis.

Wednesday, April 7, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Estimation of Healing of the Acute Rheumatic State, Graham Asher, M.D., Kansas City.

With the development of more effective means of treating the rheumatic patient has come the need of more accurate estimations of the stage of, or completion of, healing. Methods to permit finer judgment in this matter also arise from the large number of cases which are accurately diagnosed at an earlier and more remediable state. The promise of the clinical applications is a lessening of the psychic and economic strain on the family and better evaluation of the various methods of therapy and the earlier recognition of the healed quiescent state and, above all, the recognition of residuae which lead to insidious involvement of the heart or to manifest relapse.

The demonstration of significant mediastinitis and mediastinal adenitis by fluoroscopy and oblique x-rays will be shown in lantern slides and the degree of pathology suggested will be correlated with the clinical and laboratory findings in relation to the state of healing and the relative value of this useful and relatively precise method demonstrated.

9:20 a.m. Discussion: Robert J. Glaser, M.D., St. Louis.
Don C. Weir, M.D., St. Louis.

9:30 a.m. Endocrine Problems of Childhood, Henry H. Turner, M.D., Oklahoma City.

The endocrine problems of childhood are mostly concerned with growth and development involving the skeletal, reproductive and nervous systems. Normal maturation of the human organism involves many complex processes, including endocrine, nutritional and certain extrinsic factors, functioning in normal physiologic balance.

Among the non-endocrine causes of variations in growth and development are those due to: (1) inherent or constitutional factors, (2) congenital deformities, (3) anomalies of the circulatory and renal systems, (4) chronic infectious diseases, and (5) nutritional disturbances.

Those of endocrine origin include hormonal imbalance of: (1) pituitary and hypothalamus, (2) thyroid, (3) adrenals, (4) gonads, (5) parathyroids and (6) pancreas.

The differentiation of true abnormal endocrine states from conditions derived from congenital and genetic defects, which may simulate them, is often difficult and requires patience and diagnostic skill on the part of the physician. A careful and complete history is imperative and may elicit heredio-familial tendencies toward tallness or shortness, obesity or thinness, early or late puberty, or inherited genetic mutations such as hypertelorism and dyschondroplasia. Though little may be done for many of the non-endocrine types, effective hormonal therapy is available for the majority of patients with endocrine dyscrasias.

Slides of clinical cases illustrating the cardinal features of developmental changes of non-endocrine and endocrine origin in childhood will be presented. Pertinent diagnostic aids and methods of treatment will be discussed.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. The Present Status of Care of Poliomyelitis, John C. MacQueen, M.D., Iowa City.

The majority of patients with acute poliomyelitis have been cared for in polio centers. This has resulted in much of the information concerning the clinical course of the disease being known primarily to personnel working in centers of care. With the present emphasis on home care, it becomes desirable that this information become more widely known.

Information is presented concerning the effect of physical activity during the acute phase of the disease on the severity of the paralysis; correlating the use of immunizing procedures to the localization of paralysis; concerning the clinical course of the patient with acute bulbar poliomyelitis; evaluating the proper use of the lumbar puncture.

These and other clinical topics of diagnostic and prognostic interest are presented.

A clinical summary of 402 children with acute poliomyelitis is a source of the data presented.

11:00 a.m. Problems in Blood Preservation, J. Garrott Allen, M.D., Chicago.

11:30 a.m. The Differential Diagnosis of Psychogenic Symptoms, Don P. Morris, M.D., Champaign, Ill.

The first step in diagnosing a symptom as psychogenic (i.e. from primary emotional or environmental causes) is the positive establishment of conflict and stress situations by a careful history. These situations must meet certain definitive criteria: They must be subjectively and individually meaningful and important to the patient; their objective validity is of secondary importance. To be potent etiologic factors they must not be compensated for and not resolved at the time of the onset of the symptom. They must be logically related to the symptom, either by concurrence in time, especially if this is repeated, or by location of the symptom (e.g. voice symptoms in singers or preachers), or by proximity of another person important in the patient's conflict.

More conclusive evidence is obtained from the removal of the symptom by psychotherapeutic methods: thus final opinion on diagnosis must often be withheld and treatment initiated on the basis of a highly probable theory rather than on the basis of proven fact. This may be referred to as "exploratory psychotherapy" and occupies the same relative position in medicine as any other therapeutic trial.

Organic etiologies should be ruled out as rapidly and as completely as possible, but such exclusion should never be the sole basis of concluding that psychogenic factors are responsible. In many patients, however, the fact that one organic etiology has been established by no means indicates that the total picture is to be explained on this basis. Some symptoms may be caused by this and others by emotional difficulties, either primary or secondary to another disease. In such cases simultaneous treatment by several methods is clearly indicated.

1:30 p.m. House of Delegates.

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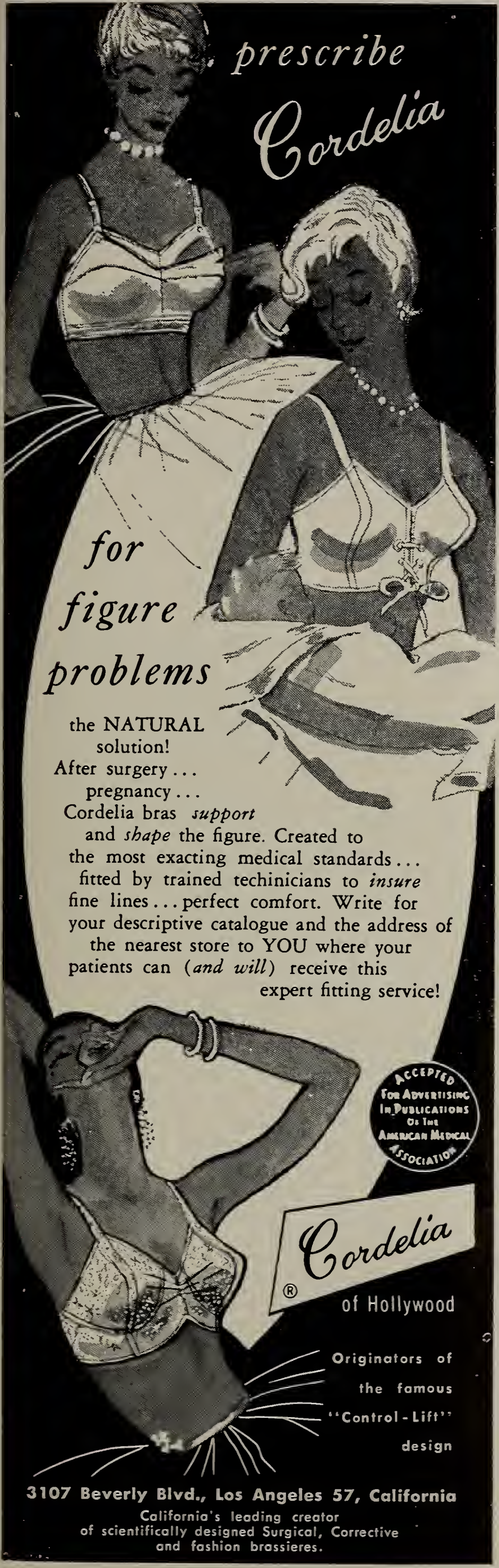

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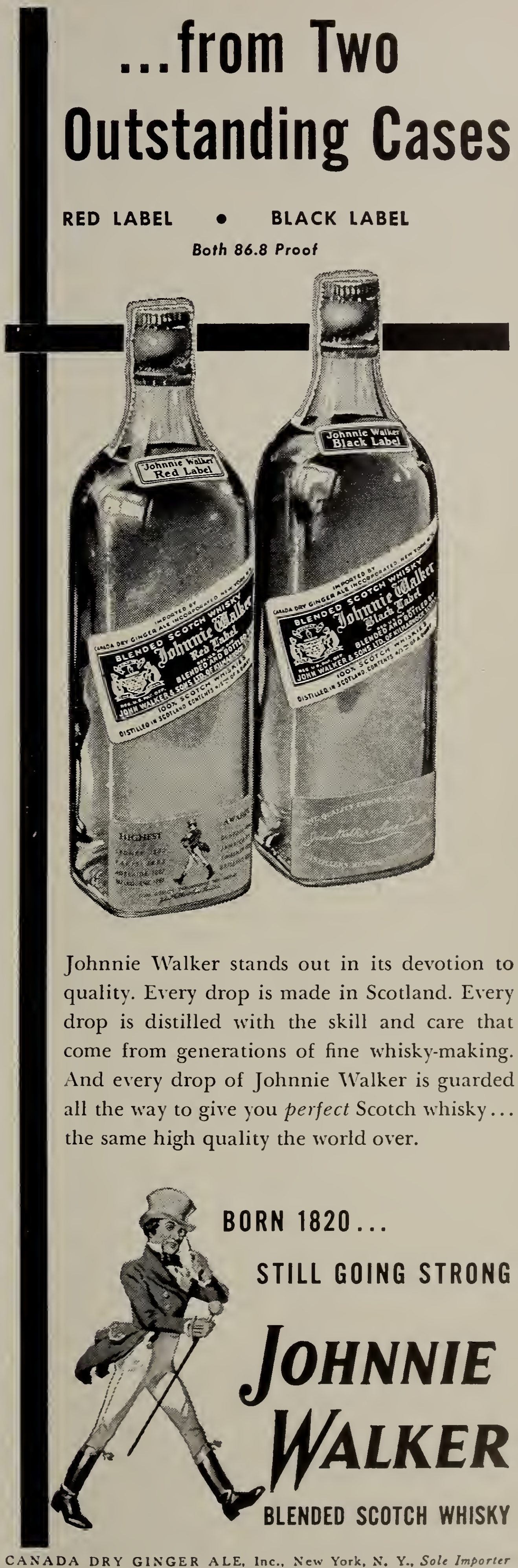

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Reynolds	J. R. Pyrtle, Centerville	
Ste. Genevieve	C. J. Clapsaddle, Ste. Genevieve	R. C. Lanning, Ste. Genevieve
Moniteau	Edgard A. Kibbe, California	Richard B. Fulks, California
Montgomery	E. J. T. Andersen, Montgomery City	S. J. Byland, Wellsville
Morgan	Ruth Kauffman, Versailles	Jack Gunn, Versailles
Newton	L. E. Rolens, Granby	M. C. Bowman, Neosho
Nodaway-Atchison-Gentry-Worth	Wm. R. Jackson, Maryville	Elvin D. Imes, Maryville
Nodaway-Atchison-Gentry-Worth	Emmett B. Settle, Rock Port	E. L. Niedermeyer, Tarkio
Nodaway-Atchison-Gentry-Worth	Albert L. Carlin, Stanberry	Frank H. Rose, Albany
Nodaway-Atchison-Gentry-Worth	Frank B. Matteson, Grant City	
North Central		
Adair	V. E. Miltenberger, Kirksville	S. L. Freeman, Kirksville
Schuyler	I. M. Nulton, Lancaster	H. E. Gerwig, Downing
Knox	F. E. Luman, Edina	
Sullivan	J. S. Montgomery, Milan	
Putnam	J. H. Holman, Unionville	P. V. Hart, Coatsville
Ozarks		
Barry	Mary J. Newman, Cassville	Robt. R. Donley, Monett
Lawrence	Arthur J. Graves, Mt. Vernon	Kenneth Glover, Mt. Vernon

Stone	Fred L. Wommack, Crane	
Christian	Stanley D. Roper, Ozark	
Taney	Wm. C. Magness, Branson	J. M. Threadgill, Forsyth
Pemiscot		
Perry		
Pettis	D. R. Edwards, Sedalia	John E. Lamy, Sedalia
Phelps-Crawford-Dent-Pulaski		
Phelps-Crawford-Dent-Pulaski		
Phelps-Crawford-Dent-Pulaski		
Phelps-Crawford-Dent-Pulaski		
Pike	C. H. Lewellyn, Louisiana	R. L. Andrae, Louisiana
Platte		
St. Louis City	Raymond O. Muether, St. Louis	Bruce Kenamore, St. Louis
St. Louis City	Daniel L. Sexton, St. Louis	John W. Berry, St. Louis
St. Louis City	David N. Kerr, St. Louis	Robert W. Kelley, St. Louis
St. Louis City	Henry C. Allen, St. Louis	Raymond T. Martin, St. Louis
St. Louis City	A. N. Arneson, St. Louis	J. Paul Altheide, St. Louis
St. Louis City	Joseph C. Peden, St. Louis	Hollis N. Allen, St. Louis
St. Louis City	Wendell G. Scott, St. Louis	Seymour Brown, St. Louis
St. Louis City	Victor E. Scherman, St. Louis	Robt. N. Tindall, St. Louis
St. Louis City	Chas. E. Martin, St. Louis	James W. Owen, Jr., St. Louis
St. Louis City	Joseph C. Edwards, St. Louis	C. Barber Mueller, St. Louis
St. Louis City	Harry K. Purcell, St. Louis	Walter P. Graul, St. Louis
St. Louis City	Walter Baumgarten, St. Louis	Leo J. LeBlanc, St. Louis
St. Louis City	Stanley F. Hampton, St. Louis	Elbert H. Cason, St. Louis
St. Louis City	Curtis H. Lohr, St. Louis	Alfred F. Sudholt, Jr., St. Louis
St. Louis City	Louis H. Kohler, St. Louis	Don C. Weir, St. Louis
St. Louis City	Willard Bartlett, Jr., St. Louis	Duff S. Allen, St. Louis
St. Louis City	Robt. D. Woolsey, St. Louis	Robt. D. Mattis, St. Louis
St. Louis City	James P. Murphy, St. Louis	Milton H. Meyerhardt, St. Louis
St. Louis City	Paul F. Max, St. Louis	Francis X. Paletta, St. Louis
St. Louis City	Joseph M. Krebs, St. Louis	Lawrence E. Mendonsa, St. Louis
St. Louis City	Sam J. Merenda, St. Louis	Wm. H. Olmsted, St. Louis
St. Louis City	Gene B. Starkloff, St. Louis	Paul S. Lowenstein, St. Louis
St. Louis City	Arthur W. Neilson, St. Louis	Llewellyn Sale, Jr., St. Louis
St. Louis City	Arthur R. Dalton, St. Louis	Luke A. Knese, St. Louis
St. Louis City	Geo. L. Hawkins, Jr., St. Louis	A. G. Boldizar, St. Louis
St. Louis City	Douglas A. Ries, St. Louis	Mary E. Morris, St. Louis
St. Louis City	J. Ernest Jensen, St. Louis	Harry D. Rosenbaum, St. Louis
St. Louis	Maurice A. Diehr, St. Louis	John A. Rogers, University City
St. Louis	Oscar P. Hampton, Jr., St. Louis	George J. Fuchs, Overland
St. Louis	Paul R. Whitener, Overland	Cecil A. Z. Sharp, St. Louis
St. Louis	Roy A. Walther, Jr., Overland	Sedgwick Mead, St. Louis
St. Louis	Carl C. Irick, Webster Groves	Robt. A. Mayer, St. Louis
St. Louis	James R. Meador, Clayton	Lois C. Wyatt, Kirkwood
St. Louis	Wm. S. Brown, St. Louis	B. Rush Loving, Ballwin
Saline	James A. Reid, Marshall	Winston K. Nix, Marshall
SEMO		
Stoddard	Neal J. Touhill, Dexter	Theo. L. Waddle, Dexter
New Madrid	J. J. Killion, Portageville	Chas. C. Reeder, New Madrid
Mississippi	Wilbur L. Davis, Charleston	J. E. Dernoncourt, Charleston
Scott	Wm. O. Finney, Chaffee	W. J. Ferguson, Sikeston
South Central		
Howell	M. B. Perkins, Willow Springs	J. N. Wiles, West Plains
Oregon	Claude W. Cooper, Thayer	
Texas	Garrett S. Hogg, Cabool	John B. Kelly, Houston
Wright	S. W. Connor, Mountain Grove	R. W. Denney, Mountain Grove
Douglas	Marvin C. Gentry, Ava	

Meat...

and Adequate Protein Nutrition of the Diabetic Patient

Although formerly it was considered desirable in diabetes mellitus to hold protein intake only slightly above minimal requirements in order to minimize metabolic activity, present day treatment recognizes distinct benefits resulting from liberal protein alimentation.[1] Generous allowances of protein heighten the patient's sense of well-being, improve vigor, and augment the organism's inherent protective forces.

For the adult diabetic, desirable daily allowances of protein range from 1 to 1.5 grams per kilogram of body weight.[1] To assure adequate amounts of protein for growth and maintenance in diabetic children, allowances should range from 2 to 3 grams per kilogram. Following acute episodes during periods of inadequate insulin treatment, the concomitant negative nitrogen balance calls for high protein feeding until lost nitrogen is restored.[2] Though caloric intake is restricted for correction of overweight, protein allowances remain unchanged.

Meat ranks high among the foods qualified to provide the desired amounts of protein in diabetic diets. In fact, meat—because its rich store of protein is of highest biologic value—may well contribute a large share of the diabetic's daily protein requirement.[3]

In addition, meat also provides important amounts of essential B vitamins and minerals. Its appetite appeal goes far in enabling the diabetic patient to stay on his prescribed diet.

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1. McLester, J. S., and Darby, W. J.: Nutrition and Diet in Health and Disease, ed. 6, Philadelphia, W. B. Saunders Company, 1952, pp. 287-299.
2. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition. Prepared with Collaboration of the Committee on Therapeutic Nutrition, Food and Nutrition Board, National Research Council, Publication 234, 1952, p. 56.
3. Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Company, 1951, p. 634.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

Ozarks	Deborah Doan, Bakersfield	
Webster	T. M. Macdonnell, Marshfield	E. G. Beers, Seymour
West Central		
Bates	Edward E. Robinson, Adrian	Arthur L. Hansen, Butler
Cass	Coburn H. Ellis, Garden City	Edward S. Jones, Harrisonville
Cedar	John J. Hill, Eldorado Springs	Wm. B. Richter, Stockton
St. Clair	Wm. H. Ellett, Appleton City	R. A. Slickman, Appleton City
Vernon	C. Braxton Davis, Nevada	James J. Pascoe, Nevada

TECHNICAL EXHIBITS

Mezzanine Floor, Hotel Jefferson

U. S. Vitamin Corporation, New York. Booth 2.

Exhibit features original, complete lipotropic therapy...Methischol...the combination of five proven lipotropic agents: B_{12}, choline, methionine, inositol and liver extract. Therapeutically effective in the treatment of hypercholesterolemia as associated with atherosclerosis, coronary disease, obesity, diabetes and various forms of liver disease, including liver cirrhosis and toxic hepatitis.

J. B. Lippincott Company, Philadelphia. Booth 3.

J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

C. B. Fleet Co., Inc., Lynchburg, Va. Booth 4.

C. B. Fleet Company, Inc., cordially invites you to stop at Booth 3 to see the exhibits of Phospho-Soda (Fleet). Phospho-Soda (Fleet) is a solution containing in each 100 cc. sodium biphosphate 48 gm. and sodium phosphate 18 gm. Phospho-Soda (Fleet), over the years, has won discriminating preference by thousands of physicians—because of its controlled action—its freedom from undesirable side effects—and its ease of administration. There is only One Phospho-Soda (Fleet).

Sharp & Dohme, Philadelphia. Booth 5.

The many indications for Hydrocortone and Cortone highlight the therapeutic importance of these hormones in everyday practice. Research data relative to more effective therapy in which penicillin is used in conjunction with Benemid probenecid completes the exhibit. Expertly trained personnel solicit discussions on these observations.

A. S. Aloe Company, St. Louis. Booth 6.

The Medical Protective Company, Fort Wayne, Ind. Booth 7.

Exclusive application to the field of Professional Liability Insurance endows The Medical Protective Company with a "know-how" in Defense Unlimited that distinguishes it from all others. It produces an enviable record in which policyholders suffer no involuntary loss from their own pockets in malpractice suits.

Pfizer Laboratories, Brooklyn. Booth 8.

You are cordially invited to visit the Pfizer Booth where you will find well informed representatives who will be happy to supply you with information and answer any questions relative to Pfizer products. Terramycin dosage forms, Bonamine, Cortril and other Pfizer-Syntex Hormone products are featured attractions of the Pfizer exhibit.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. Booth 9.

Welcome to the Camel-Cavalier Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of Camels, America's most popular cigarette, or Cavaliers, the king size cigarette of extra mildness and distinctive flavor.

W. B. Saunders Company, Philadelphia. Booth 10.

Among the many new books on display at the Saunders Booth are, Sweet: Thoracic Surgery, second edition; Gross: Surgery of Infancy and Childhood; and Current Therapy 1954. These and others, making up our complete line, are available for your inspection. Ask about our new Pediatric Clinics of North America.

Eli Lilly and Company, Indianapolis. Booth 11.

You are cordially invited to visit the Lilly exhibit located in Booth 11. The display contains information on recent therapeutic developments and features the story of the Lilly Junior Taste Panel. Lilly sales people are in attendance. They welcome your questions about Ilotycin (Erhthromycin, Lilly) and other Lilly products.

Eisele & Company, Nashville. Booth 12.

Eisele & Company are displaying their regular line of clinical thermometers; hypodermic syringes; hypodermic needles; Eco bandages and specialty glassware.

Mead Johnson & Company, Evansville. Booth 13.

Mead Johnson & Company, Booth 13, features Lactum, Mead's liquid formula for infant feeding; Poly-Vi-Sol and Tri-Vol-Sol, superior vitamin supplements for infants; Panalins and Panalins-T, new vitamin capsules based on the new National Research Council's recommendations for vitamin maintenance and therapy. Natalins, the smaller, complete prenatal capsules, and Mulcin, the new orange flavored vitamin liquid, also is shown.

The Dick X-Ray Company, St. Louis. Booth 14.

The Dick X-Ray Company features the most recent developments in Westinghouse X-Ray apparatus and X-Ray accessory items. Also on display are the Cambridge Simpli-Scribe Direct Writing Electrocardiograph, the Liebel-Flarsheim SW-660 Diathermy Unit, and the new Liebel-Flarsheim Portable Bovie Electrosurgical Unit with exclusive self compensating spark gap assembly.

C. W. Alban & Company, St. Louis. Booth 15.

Alban Company is displaying quality surgical instruments of American Stainless Steel and imports including those of Stille Sweden, Microscopes, Diagnostic Instruments and Laboratory Accessories. The Alban Defibrillator is a special item of interest, also Permaplastin for prothrombin timing. Medical books of all publishers are always in stock at Alban.

Burroughs Wellcome & Co., Inc., Tuckahoe, N. Y. Booth 16.

Merezine® hydrochloride brand Cyclizine Hydrochloride. Prevents and relieves motion sickness and vertigo without causing drowsiness. Syrup of Antepar Citrate brand Piperazine Citrate eradicates pinworms. Pleasant to take. Tricoloid® brand Tricyclamol, Compressed, sugar-coated new anticholinergic for relief of hyperacidity, functional diarrhea and gastrointestinal spasm.

Dairy Council of St. Louis, St. Louis. Booth 17.

Milk for Protein—a modernistic illuminated exhibit showing protein equivalents of dairy products and other complete proteins in line with daily food needs as suggested by the National Research Council 1954.

Doho Chemical Corporation, New York. Booth 18.

The Doho Chemical Corporation is pleased to exhibit: Auralgan, the ear medication for the relief of pain in otitis media and removal of cerumen; New Otosmosan, the effective nontoxic ear medication which is fungicidal and bactericidal (gram negative-gram positive) in the suppurative and aural dermatomycotic ears; Rhinalgan, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged; Rectalgan, the liquid topical anesthesia, also for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

Parke, Davis & Company, Detroit. Booth 19.

Medical service members of our staff are in attendance at our exhibit for consultation and discussion of various products of particulal interest to members of the Association. Important specialties such as Penicillin S-R, Benadryl, Ambodryl, Milontin, Amphedase, Dilantin Suspension, Vitamins, Oxycel, Thrombin Topical are featured. You are cordially invited to visit our exhibit.

THE
W. E. ISLE CO.
1121 GRAND AVE.
KANSAS CITY, MO.

TRUSSES
...Accurately fitted to assure complete protection and greatest possible comfort

ENTIRE SECOND FLOOR TELEPHONE VICTOR 2350

SECLUSION MATERNITY

FAIRMOUNT HOSPITAL
For Unmarried Girls
Est. 1909

Write for Information

MRS. EVA THOMSON
4911 East 27th St.
Kansas City, Mo.

Private sanitarium with certified obstetrician in charge. All adoptions arranged through juvenile court. Early entrance advised.
Rates reasonable. In certain cases work given to reduce expenses.

The Neurological Hospital

2625 West Paseo
Kansas City, Missouri

★ ★ ★

A voluntary hospital providing the care and treatment of nervous and mental patients and associate conditions.

The Norbury Sanitarium

Established 1901—Incorporated
Licensed—Jacksonville, Illinois

Frank Garm Norbury, A.M., M.D.,
Medical Director
Samuel N. Clark, M.D., Physician
Henry A. Dollear, M.D., Physician

E. Fougera & Company, Inc., New York. Booth 20.

Brown & Williamson Tobacco Corporation, Louisville. Booth 21.

The exclusive Health-Guard Filter tip of the Viceroy King Size Cigarette provides beneficial protection to the smoker against nicotine and tars. The 20,000 tiny filtering traps in each Viceroy Filter effectively remove far more nicotine and tars than any other leading cigarette, as proved by testing methods accepted by the United States government. An explanation of the Unique advantages in smoking Viceroy will be of real interest to members and guests who visit the Viceroy exhibit.

Zimmer Manufacturing Company, Warsaw, Ind. Booth 22.

Zimmer Manufacturing Company has their display of orthopedic appliances in Booth 22. Among many other new items are shown Zimmer Modification of the Charnley Clamp, Ruuska Meniscotome, Wilson Frame for spinal operations, Universal Pneumatic Tourniquet, new Strap Arm Sling, Gable-McKinney Walker and the Haskell Cervical Traction Device.

Sandoz Pharmaceuticals, New York. Booth 24.

Sandoz Pharmaceuticals cordially invites you to visit our display in Booth 24: Hydergine, a vasorelaxant with central and peripheral action useful in hypertension and peripheral vascular disorders and geriatric conditions; Fiorinal, a new approach to therapy of tension headache and other head pain due to sinusitis and myalgia; Bellergal, valuable as an autonomic inhibitor in a variety of functional ills—the volume of favorable clinical reports is constantly increasing; Cafergot, available in oral and rectal form for effective control of head pain in migraine and other vascular headaches. Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

American Ferment Co., Inc., New York. Booth 25.

Increased *in vivo* digestion and utilization of dietary proteins through use of the proteolytic enzyme Caroid is featured. Caroid and Bile Salts Tablets and Alcaroid Antacid, both containing Caroid; and Supligol, a whole bile-ketocholanic acid compound useful in the management of early biliary dysfunction are shown.

Vaisey-Bristol Shoe Co., Inc., Rochester, N. Y. Booth 26.

Hanley Medical Equipment Company, St. Louis. Booth 27.

Testagar & Co., Inc., Detroit. Booth 28.

The professional service representatives of Testagar & Co., Inc., would be pleased to greet their friends at Booth 28. Some of our newest developments are being introduced, including Sperotabs #2, the new antacid, antispasmodic combination that does not constipate or disturb the acid base balance; an accurate, inexpensive treatment for relief of peptic ulcer and various gastrointestinal dysfunctions. A full line of parenteral solutions are displayed. Several recent developments in parenteral solutions are featured.

United Medical Equipment Company, Kansas City. Booth 29.

The new Profexray 300 MA, 100 KV motor drive tilt table with the completely automatic control is being exhibited. Also on display are the all new PC-3 Cardiotron—direct-writing electrocardiographic machine, and Raytheon Microwave Diatherm, plus the new E. P. L. portable Meta-Basal.

Baby Development Clinic, Chicago. Booth 30.

Maternity Counselling Service: offers demonstration material to aid in teaching expectant mothers: care and support of breast; support of abdomen and relief of back strain; personal cleanliness. Preparation for infant and child care aids on bathing, feeding, toileting, as well as care of feet. Material also available for well baby conferences.

Carroll Dunham Smith Pharmacal Company, New Brunswick. Booth 33.

Our exhibit features Lipotriad (Smith) a new unusually potent lipotropic and oxytropic product, in both liquid and capsule form for the treatment of many conditions associated with faulty fat metabolism. Our representatives will also welcome the opportunity to discuss Calferbee, Hemo-Vitol, Neo-Sedaphen and other specialties.

George A. Breon & Company, New York. Booth 34.

George A. Breon & Co., distributors of Lanteen products, invites convention members to their exhibit of reproductions of well known paintings by famous European artists at Booth 34. Lithographic prints of these beautiful paintings are available upon request. Representatives will be happy to discuss Lanteen products with visiting members.

Warner-Chilcott Laboratories, New York. Booth 35.

Two important cardiovascular agents are featured at the Warner-Chilcott Booth: Methium—to lower blood pressure and relieve hypertensive symptoms, and Peritrate—to prevent attacks in angina pectoris. Representatives and research personnel will welcome an opportunity to discuss these drugs with you.

Wm. P. Poythress & Co., Richmond, Va. Booth 36.

You are cordially invited to visit at Booth 36 where the Poythress Missouri representatives, Messrs. Hohl and Morrow, will be happy to discuss with you the established Poythress preparations Solfoton, Panalgesic and Trocinate, and also the distinctive new Poythress antiasthmatic product, Mudrane.

Ciba Pharmaceutical Products, Inc., Summit, N. J. Booth 37.

The Ciba exhibit (Booth 37) features Serpasil, a pure crystalline alkaloid of Rauwolfia which usually produces mild, gradual sustained lowering of blood pressure with a slowing of the pulse rate. Representatives in charge of the

To Brighten the Diet...

...to make days and nights more pleasant for the aged patient

An appetite stimulant...mild euphoretic...appealing sedative at bedtime...a supplemental natural source of minerals, vitamins, and readily absorbable nutriments—these are some of the roles that wine can play in the daily diet of your aged or convalescent patient.

Few substances—natural or artificial—can offer the unique combination of qualities found in wine, the traditional beverage of moderation. Praised through the ages for its "tonic" effect, wine has been intensively studied since 1939 by American laboratory and clinical investigators. These modern tests have revealed the physiological basis for subjective theories of past years, and are now explaining the action and fate of wine and its components in the body.

Many of the important physiological properties of wine differ significantly from those of plain alcohol. Wine increases appetite and heightens olfactory acuity. It stimulates the flow of salivary juices. Buffered by its own natural salts and organic acids, it provides a mild, prolonged stimulation of gastric secretion. This same buffer effect makes the diuresis produced by wine a slow, moderate one.

Wine is also a ready and pleasant source of nutrient energy, and of absorbable iron and other essential minerals. The vasodilating action of wine aids toward improving circulation and increasing cardiac output.

A bit of sherry or light wine before meals, table wine with luncheon or dinner, or a glass of port at bedtime can add a welcome touch of interest and "elegance" to the daily routine of the convalescent and the elderly patient. The day seems shorter and brighter, and the night more pleasant and relaxed.

For a few cents a day your patients can have wines produced from the world's finest grape varieties, grown in an ideal climate and handled with consummate skill. Research information on wine is available upon request. Wine Advisory Board, San Francisco 3, California.

Ciba booth will be pleased to discuss the role of Serpasil in the treatment of hypertension and to furnish literature on this new drug.

The Harrower Laboratory, Inc., Jersey City. Booth 38.

This display features Calcisalin, a prenatal dietary supplement formulated according to a new principle, which provides that maximum assimilation of calcium in the prenatal diet can be achieved through use of a phosphorus-free form of calcium. In Calciasalin, calcium lactate replaces dicalcium phosphate; aluminum hydroxide gel removes excess dietary phosphorus from the intestinal tract; iron and vitamins are included according to recommendations of the National Research Council.

General Foods Corporation, New York. Booth 39.

It is a pleasure for General Foods to feature decaffeinated Instant Sanka—100 per cent pure coffee—at the Ninety-sixth Annual Session of the Missouri State Medical Association. Won't you stop by for your morning cup? And come back for "seconds" any time between meetings? We shall look forward to seeing you—one and all. Be sure to register for a professional sample and product literature.

Brown & Williamson Tobacco Corporation, Louisville. Booth 40.

Many members of the medical profession are showing an unusual interest in Kool (mildly metholated) Cigarettes for which there is a wide and growing acceptance among smokers who have sensitive throats or respiratory disorders. A folder of interesting facts and a useful souvenir will be presented to each member who visits the Kool exhibit.

Abbott Laboratories, North Chicago. Booth 41.

Hamilton-Schmidt Surgical Co., St. Louis. Booth 42.

Winthrop-Stearns, Inc., New York. Booth 43.

Winthrop-Stearns, Inc., New York, invite you to visit Booth 43 where the following products are featured: Alevaire, nontoxic inhalant which thins sticky pulmonary secretions in bronchitis, bronchiectasis, and neonatal asphyxia, due to atelactasis or aspiration of amniotic fluid; Levophed bitartrate, the most powerful pressor antidote for shock due to myocardial infarction, surgical and nonsurgical trauma, hemorrhage and other causes. Levophed is noted for its prompt, predictable, reliable and easily controlled action. Administer diluted in 5 per cent dextrose or dextrose in saline infusion.

Ames Company, Inc., Elkhart, Ind. Booth 44.

Clinitest, for urine-sugar, is standardized. This assures uniformly reliable results whenever and wherever a test is performed—office, ward, clinic or patient's home. Standardization not only curtails error but saves personnel's time by elimination of preparing and mixing reatents. Other Ames diagnostic tablet tests on display are: Acetest, Bumintest, Hematest and Ictotest.

Pet Milk Company, St. Louis. Booth 45.

Specially trained representatives are in attendance to discuss the use of Pet Evaporated Milk in infant feeding and Pet Nonfat Dry Milk for high protein diets. A variety of services that are time-savers for busy physicians will be furnished on request. Miniature Pet Milk cans will be given to visitors at the exhibit.

A. H. Robins Company, Inc., Richmond, Va. Booth 46.

The Robins exhibit features Donnatal Plus tablets and the new Elixir; and Allbee with C, the potent, economic water-soluble vitamin preparation providing therapeutic supplies of critical B complex factors and 250 mg. ascorbic acid in each capsule. Other featured prescription specialties include Robins' comprehensive analgesic, Phenaphen; and the antitussive expectorant, Robitussin.

Medco Products Company, Tulsa, Okla. Booth 49.

O'Connell Bros., Inc., St. Louis. Booth 50.

P. Lorillard Company, New York. Booth 51.

P. Lorillard Company, manufacturers of Old Gold and Embassy Cigarettes as well as Briggs Pipe Mixture and other famous tobacco products will exhibit and demonstrate their new Kent Cigarettes with the exclusive Micronite Filter, which takes out up to seven times more nicotine and tars than other filter cigarettes.

W. C. Scott & Company, Kansas City. Booth 52.

The Coca-Cola Company, Atlanta, Ga. Booth 53.

Ice cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company of St. Louis and the Coca-Cola Company.

Dumas-Wilson & Co., St. Louis. Booth 54.

Dumas-Wilson & Co. extends a cordial invitation to the physicians attending this Annual Session to visit our booth featuring several new specialty items of interest to the specialist as well as the general practitioner.

Eggert-Carroll-Schroeder Agency, Inc., St. Louis. Booth 55.

Missouri State Medical Association's officially approved Sickness-Accident Disability Insurance Plan with Metropolitan Casualty Insurance Co. of New York affording special broad protection to the satisfaction of Missouri Doctors since 1943. We are proud of our record of satisfied claimants. Information gladly furnished at our Booth 55.

E. R. Squibb & Sons, New York. Booth 56.

At Booth 56, E. R. Squibb & Sons features Raudixin, the safe hypotensive agent. Raudixin contains the whole root of Rauwolfia serpentina accurately standardized for uniform hypotensive and sedative effect. Our representative

WHAT'S NEW?

Luzier's, Inc., now offers a Baby Service which includes three exceptionally fine preparations for baby's comfort, cleanliness and sweetness.

The preparations are beautifully packaged and priced as follows: Baby Powder—12 ounces $1.25; Baby Lotion—8 ounces $1.25; Baby Oil—8 ounces $1.25. (All items are subject to the usual State and County Taxes.)

Accepted by The Committee on Cosmetics of the American Medical Association.

Luzier's, Inc., Makers of Fine Cosmetics and Perfumes

KANSAS CITY 41, MISSOURI

will be glad to discuss with you the advantages of Raudixin used alone or in combination with other drugs.

Encyclopedia Americana, Grand Rapids. Booth 57.

We proudly present the greatest Americana of all Americanas, our 1954 edition, world wide in scope, American in spirit. Preferred. Ask any librarian. We also display the Heritage Edition of the Book of Knowledge for children. Both adapted to the American school system and included in one combination exhibit offer.

General Electric Company, Springfield, Ill. Booth 60.

The William A. Webster Co., Memphis, Tenn. Booth 61.

The William A. Webster Company is exhibiting its complete line of suppositories, Supprettes. The drugs exhibited, all using the newly developed water soluble suppository base, Neocera which blends high and low molecular weight waxes for controlled break-down and uniform absorption and requiring no refrigeration, are: Aquachloral (chloral hydrate), Pentobarbital Sodium, Gential Violet, Theophylline, Theophylline-Pentobarbital Sodium.

Brooks Appliance Company, Chicago. Booth 62.

The Brooks Appliance Company are exhibiting and describing in detail the technic of applying the combination pressure bandages. The moist medicated Primer plus the Dalzoflex Elastic Adhesive Bandages which are used in treating leg ulcers and phlebitis. Elastic Stockings, the Nulast Elastic Crepe Bandages and Surgical Instruments are also displayed.

The Upjohn Company, Kalamazoo, Mich. Booth 63.

The Upjohn exhibit features Cortef, brand of hydrocortisone. Reports from clinicians and practitioners reveal dramatic results in the use of Cortef where cortisone is indicated. Cortef is available in tablet or ointment form for oral or topical use. Upjohn representatives will welcome the opportunity to furnish additional information to the profession.

G. D. Searle & Co., Chicago. Booth 65.

You are cordially invited to visit the Searle Booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Features are Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine, and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

M & R Laboratories, Columbus, Ohio. Booth 66.

Your Similac representatives are happy to take part in this meeting. They are pleased to have the opportunity to discuss with you the role of Similac in infant feeding. They have for you the latest Pediatric Research Conference Reports. Also available are current reprints of pediatric nutritional interest.

MISSOURI SOCIETY MEDICAL TECHNOLOGIST CONVENTION

Hotel Jefferson, St. Louis
April 5, 6, 7, 1954

PROGRAM

Monday, April 5

9:00 a.m. Invocation, Father McInerny, Regent, St. Louis University School of Nursing, St. Louis, Mo.

9:05 a.m. Micro-Technics, Sister Maureen Claire, M.T. (ASCP) St. Mary's Hospital, St. Louis, Mo.

9:30 a.m. Mycology Specimens, Miss Audrey Murphy, M.T. (ASCP), Clinical Pathological Laboratories, St. Louis, Mo.

10:00 a.m. Intermission—Problem Clinic and View Exhibits.

10:30 a.m. Interpretation of Agglutination Test From the Technologist View Point, Miss Frances Murry, M.T. (ASCP) Firmin Desloge Hospital, St. Louis, Mo.

11:00 a.m. Interpretation of Agglutination Test From the Doctor's View Point, Dr. George Edwards, St. Louis University, St. Louis, Mo.

11:45 a.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

2:00 p.m. Where to Send Virus Specimens, Dr. Alvar A. Werder, University of Kansas Medical Center, Kansas City, Kansas.

2:30 p.m. Practical Aspects of Parasitology, Dr. H. Tschuyia, Washington University, St. Louis, Mo.

3:00 p.m. Intermission.

3:30 p.m. Panel on Recruitment, Miss Betty Wesley, M.T. (ASCP) City Hospital, St. Louis, Mo.

Tuesday, April 6

9:00 a.m. Fluid Balance, Dr. William Daughaday, Barnes Hospital, St. Louis, Mo.

9:30 a.m. Recent Advances in Hemoglobin Chemistry, Dr. Amoz Chernoff, Barnes Hospital, St. Louis, Mo.

10:00 a.m. Intermission—Problem Clinic and View Exhibits.

10:30 a.m. NPN and Urea Nitrogen, Miss Hildegarde Kramer, Clinical Pathological Laboratories, St. Louis, Mo.

11:15 a.m. Calcium Determinations on the Flame Photometer, Dr. Frederick Coller, St. John's Hospital, Springfield, Mo.

12:00 p.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

2:00 p.m. Prothrombins, Dr. Opal Hepler, Northwestern University, Evanston, Illinois.

3:00 p.m. Intermission.

3:30 p.m. Subject to be announced, Dr. James King, St. Louis University, St. Louis, Mo.

4:00 p.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

Wednesday, April 7

9:00 a.m. Blood Bank Panel, Miss Katherine Frei, M.T. (ASCP) Veteran's Hospital, St. Louis, Mo.; Dr. R. O. Muether, St. Louis County Hospital, St. Louis, Mo., and Miss Margaret Burns, M.T. (ASCP) Firmin Desloge Hospital, St. Louis, Mo.

10:00 a.m. Intermission—Problem Clinic and View Exhibits.

10:30 a.m. Significance of VDRL versus Kahn, Dr. Nicholas Duffet, City Laboratories, St. Louis City Health Division, St. Louis, Mo.

11:15 a.m. Histology, New Staining Technics, Dr. Hilliard Cohen, Menorah Hospital and Medical Center, Kansas City, Mo.

12:00 p.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

ACCIDENT, HOSPITAL AND SICKNESS INSURANCE

For Physicians, Surgeons, Dentists Exclusively

ALL PREMIUMS COME FROM → PHYSICIANS SURGEONS DENTISTS ← ALL CLAIMS GO TO

$5,000 accidental death Quarterly $8.00 $25 weekly indemnity, accident and sickness	$15,000 accidental death Quarterly $24.00 $75 weekly indemnity, accident and sickness
$10,000 accidental death Quarterly $16.00 $50 weekly indemnity, accident and sickness	$20,000 accidental death Quarterly $32.00 $100 weekly indemnity, accident and sickness

Cost Has Never Exceeded Amounts Shown

ALSO HOSPITAL INSURANCE

	Single	Double	Triple	Quadruple
60 days in Hospital	5.00 per day	10.00 per day	15.00 per day	20.00 per day
30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

$4,000,000.00
INVESTED ASSETS

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION
51 years under the same management

$19,500,000.00
PAID FOR CLAIMS

400 First National Bank Building Omaha 2, Nebraska

$200,000.00 deposited with State of Nebraska for protection of our members

2:00 p.m. Hematology Seminar, Sister Anna Marie Skinner, M.T. (ASCP) St. John's Hospital, St. Louis, Mo., Moderator. Dr. Virgil Loeb, Jr., Department of Hematology, Washington University; Discussants: Dr. William Drake, St. John's Hospital; Dr. Herbert Wiegand, Deaconess Hospital. Hematology Information Panel: Miss Genevieve Woods, M.T. (ASCP), St. Louis City Hospital; Miss Grace Arimura and Miss Victoria Kirchoff, M.T. (ASCP), Department of Hematology, Washington University; Mrs. Fred Beeler, M.T. (ASCP), Firmin Desloge Hospital, St. Louis, Mo.

3:00 p.m. Intermission.

3:30 p.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

4:30 p.m. Film on Rh, Dr. Phillip Levine, Ortho Laboratories.

AMERICAN PHYSICAL THERAPY ASSOCIATION

Hotel Jefferson, St. Louis
Monday, April 5

SCIENTIFIC PROGRAM

9:00 a.m. Geratic Medicine, William B. Kountz, M.D., St. Louis.

9:45 a.m. Physical Therapy in Gerontology, Marie Ann Brown, Physical Therapist, Deaconess Hospital, St. Louis.

10:15 a.m. Intermission to View Exhibits.

10:30 a.m. Physical Medicine in a Tuberculosis Hospital, Edward Dunner, M.D., St. Louis.

11:00 a.m. Physical Therapy and Chest Surgery Patients, Miss Eugenia Pierce, Physical Therapist, V. A. Hospital, Jefferson Barracks.

11:30 a.m. Lunch and Tour of selected St. Louis Hospitals.

1:45 p.m. Asthma: Classification and Description, Stanley F. Hampton, M.D., St. Louis.

2:30 p.m. Physical Therapy for Asthma Patients, Evelyn Bachman, Physical Therapist, St. Anthony Hospital.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Upper Extremity Amputees: Latest Research of the University of Southern California, Henry Ferris, M.D., V. A. Regional Office, St. Louis.

4:15 p.m. Upper Extremity Amputees: Latest Research of the University of Southern California, Evelyn Walters, Physical Therapist, V. A. Regional Office, St. Louis.

4:45 p.m. Adjournment.

News From Missouri's Three Medical Schools

WASHINGTON UNIVERSITY

Grants totaling $41,191 have been awarded Dr. Eli Robins, Dr. Carl F. Cori and Dr. James O'Leary by the National Foundation for Infantile Paralysis. A gift of $50,000 received from John S. Swift, board chairman of John S. Swift Co., St. Louis, will be used for research in the Schools of Medicine and Dentistry. Studies will be administered in orthopedics by Dr. Oscar P. Hampton, Jr.; in skin diseases by Dr. Clinton W. Lane; in asthma under Dr. Stanley F. Hampton; in degenerative circulatory diseases under Dr. William B. Kountz; and in oral rehabilitation in the School of Dentistry by Dr. James B. Costen. Part of the funds will go for dental treatment of indigents.

Distinguished visiting lecturers at the Medical School in December were Dr. F. J. W. Roughton, John Humphrey, Professor of Colloid Science, University of Cambridge, England; and Dr. Alexander B. Gutman, editor of the *American Journal of Medicine,* and director of Medical Service, Mt. Sinai Hospital, New York. Dr. Gutman was en route to Kansas City where he initiated a new program of postgraduate medical education at Kansas City General Hospital.

Papers by Dr. Jules Weiss, Dr. Theodore E. Walsh, and Dr. Ernest L. Wynder, graduate of the School of Medicine now at Memorial Hospital Center for Cancer and Allied Diseases, Dr. Evarts A. Graham and Miss Adele B. Croninger were presented at the meeting of the Washington University Medical Society January 27.

Drs. Pi Yong-Kan Koh and Sang-Chai Choi of Korea, chancellors of Kyongbuk University, Taegu, and South Cholla Province National University, Kwangju, respectively, spent a month at the School of Medicine and the main campus studying the operation of the University.

UNIVERSITY OF MISSOURI

Dr. Frederick A. Middlebush, President of the University of Missouri for twenty years, submitted his resignation effective June 30, 1954. Doctor Middlebush resigned for reasons of ill health. He has been elevated to President Emeritus, has been granted a year's leave of absence on sabbatical leave, and will return to the Campus in 1955 as Director of the University's Development Funds.

Miss Dorothy L. Vorhies, Head of the Dietary Department, Hermann Hospital, Houston, Texas, has been appointed Associate Professor of Dietetics and Director of the Dietary Department at University Hospitals, effective May 1, 1954.

The United States Public Health Service has awarded a Grant of $25,000 for undergraduate teaching in cancer at the University of Missouri, said Grant to be given under the direction of Dr. Roscoe L. Pullen.

The Steber Instrument Company, St. Louis, Missouri, has awarded the School of Medicine $70.00 as royalty payments on the Stephenson Cardiac Defibrillator, an instrument designed for the treatment of cardiac arrest by Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, University of Missouri.

The widow of Dr. J. C. Parrish of Vandalia, Missouri, prominent physician, and former member of the Board of Curators of the University of Missouri, has established an annual scholarship of $250.00 for a worthy student in the third-year class, said scholarship to be first awarded when the first third year class has been instituted.

Planning on the new Medical Sciences Building is proceeding rapidly.

SAINT LOUIS UNIVERSITY

Additions to the Saint Louis University School of Medicine faculty announced since September 1, include: Dr. James P. King, assistant professor of pediatrics and director, the Pediatric Out-Patient Clinic; Alfred T. Kornfield, Ph.D., assistant Professor of Physiology; Dr. Maurice B. Roche, Senior Instructor in Orthopedic Surgery; Dr. Donald R. Burke, Senior Instructor in Surgery; Dr. Waldo B. Edwards, Senior Instructor in Gynecology and Obstetrics; Dr. John W. Berry, Instructor in Internal Medicine; Dr. James W. Clawson, Instructor in Surgery; Dr. George A. Edwards, Instructor in Internal Medicine; Dr. Otokar Machek, Instructor in Orthopedic Surgery; Dr. Malcolm G. Pierson, Instructor in Surgery; D. Ralph Strength, Ph.D., Instructor in Biochemistry; Dr. Drennan Bailey, Assistant in Surgery; Dr. Robert V. Brennan, Assistant in Urology; Dr. Patricia A. Brennan, Assistant in Pediatrics; Dr. John E. Byrne, Assistant in Urology; Dr. James L. Donahoe, Assistant in Pediatrics; Dr. Edgar G. Harrison, Assistant in Pathology; Dr. William D. Schierman, Assistant in Internal Medicine; Dr. Austin R. Sharp, Assistant in Pediatrics; Dr. John Boyd Meyers, Assistant in Medicine; Paul M. Lish, M.S., Assistant in Pharmacology; Dr. Peter J. McFarlane, Assistant in Gynecology and Obstetrics.

Dr. Willis E. Smith, professor of Obstetrics and Gynecology at the University of Arkansas, delivered the 5th annual William H. Vogt, Sr., lecture at the Saint Louis University Theatre, 3642 Lindell, Thursday evening, January 21, sponsored by the Alpha Mu Chapter, Alpha Kappa Kappa Fraternity.

Dr. Albert B. Sabin, professor of research pediatrics, Children's Hospital Research Foundation, Cincinnati, Ohio, delivered the 8th annual Hanau Loeb lecture at Saint Louis University School of Medicine, sponsored by the Phi Delta Epsilon Medical Fraternity, on February 25.

FATHERS AND SONS ATTEND HOSPITAL DINNER

Six father-and-son pairs of physicians, all now on St. John's Hospital (St. Louis) staff, attended the Hospital's sixteenth annual Christmas dinner for its doctors on Thursday evening, December 10. The twelve two-generation medical men are: Dr. Joseph P. Costello, Dr. Joseph C. Peden, Dr. Charles H. Neilson, Dr. Augustus P. Munsch, Dr. Linus M. Ryan, and Dr. Otto V. Lieb, and their sons: Dr. Joseph P. Costello, Jr., Dr. Joseph C. Peden, Jr., Dr. Arthur W. Neilson, Dr. Girard A. Munsch, Dr. Robert E. Ryan, and Dr. Francis A. Lieb.

In addition to the some 150 St. John's Hospital physicians who attended the dinner, special guests included Dr. Fred W. Bailey, formerly co-chief surgeon at St. John's Hospital and now living in St. Petersburg, Florida; Reverend Valentine J. Roche, S.J., St. Louis University, and Reverend Thomas J. O'Donnell, C.S.C., Assistant to the Director of the Notre Dame University Foundation.

Seated are Drs. Joseph P. Costello, Joseph C. Peden, Charles H. Neilson, Augustus P. Munsch, Linus M. Ryan and Otto V. Lieb. Standing are Drs. Joseph P. Costello, Jr., Joseph C. Peden, Jr., Arthur W. Neilson, Girard A. Munsch, Robert E. Ryan and Francis A. Lieb.

This preholiday affair is given each year as a gesture of appreciation by the Sisters of Mercy who have conducted St. John's Hospital since its establishment in 1871. Dr. Grayson Carroll, Associate Chief of Staff, was the toastmaster.

EISENHOWER ADMINISTRATION'S MEDICAL HEALTH PROGRAM

(From the Washington News Letter)

1. A federal corporation to reinsure commercial and nonprofit health insurance plans.

2. Liberalization of income tax laws to allow more deduction for medical expenses. Present law limits deductions to the amount in excess of 5 per cent of taxable income; this would be dropped to possibly 3 per cent and health insurance payments made deductible.

3. The Federal government to take a more important role in rehabilitation of the physically handicapped.

4. Extension of social security to more than 10,000,000 additional persons. (The President's State of the Union Message did not mention mandatory coverage of physicians and others, but the Administration's bill carries this provision.)

5. Continuation of medical care for military dependents, but the message does not give any detailed recommendations.

6. Broadening of present Hospital Survey and Construction Act (Hill-Burton) to aid in development of facilities for the chronically ill, diagnostic centers, rehabilitation facilities, nursing homes.

WHAT THE PRESIDENT SAID ON MEDICAL, HEALTH ISSUES

Following are excerpts from President Eisenhower's State of the Union message. They are points of interest to the medical profession.

Socialization of Medicine: "I am flatly opposed to the socialization of medicine. The great need...can best be met by the initiative of private plans. But it is unfortunately a fact that medical costs are rising and already impose severe hardships on many families. The federal government can do many things and still avoid the socialization of medicine."

Research: "The federal government should encourage medical research in its battle with such diseases as cancer and heart ailments, and should continue to help states in health and rehabilitation."

Hill-Burton Program: "The present...act should be broadened to assist in the development of adequate facilities for the chronically ill...of diagnostic centers, rehabilitation facilities and nursing homes."

Reinsurance of Health Plans: "The war on disease ...needs a better working relationship between government and private initiative....A limited government reinsurance service would permit the private and non-profit insurance companies to offer broader protection to more of the many families which want and should have it."

Rehabilitation: "The program for rehabilitation of the disabled especially needs strengthening....This program presently returns each year some 60,000 handicapped individuals to productive work. Far more disabled people can be saved each year...if this program is gradually increased."

Military Dependents: "Pay alone will not retain in the career service...the necessary numbers of long-term personnel. I strongly urge, therefore, a more generous use of other benefits important to service morale. Among these are more adequate living quarters, and medical care for dependents."

Medical Tax Deductions: ...we propose more liberal tax treatment for dependent children who work, for widows or widowers with dependent children, and for medical expenses."

Veterans: "The internal reorganization of the Veterans Administration is proceeding with my full approval. When completed, it will afford a single agency whose services, including medical facilities, will be better adapted to the needs of those 20 million veterans to whom the Nation owes so much." (There was no further reference to VA in the address.)

Social Security: "I ask that this extension (to 10,000,000 more persons) soon be accomplished. This and other major improvements...will bring substantial benefit increases and broaden the membership of the insurance system, thus diminishing the need for Federal grants-in-aid..."

In 1949 a three week course of treatment with compound E (cortisone), derived from the bile of about 15,000 cattle, was about $18,000.

FINANCIAL STATEMENT FOR 1953

LENNERTSON AND COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

ROBERT A. LENNERTSON, C. P. A.
MEMBER—AMERICAN INSTITUTE OF ACCOUNTANTS
HOWARD E. SALOMO, C. P. A.
SAINT LOUIS 5, MISSOURI

January 30, 1954

Missouri State Medical Association,
634 North Grand Boulevard,
St. Louis, Mo.
Gentlemen:

An examination has been made of the books and records of the Missouri State Medical Association for the year 1953 and a report is presented thereon together with the following attached statements:

Exhibit A Balance Sheet.
Exhibit B Income Statement.
Exhibit C Statement of Committee and Meeting Expenses.
Exhibit D Dues Receivable and Membership by Counties.

In connection with the statements, it should be noted that members' dues and assessments are taken into income on the cash basis when received whereas the other accounts are maintained on the accrual basis. Items paid in advance are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The December 31, 1953 Balance Sheet and the Income Statement for the year then ended were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transactions.

Cash in banks, as shown by the books, was reconciled with the regular monthly bank statements and confirmed by the depositaries. The petty cash fund of $25.00 and United States 2½ per cent Savings Bonds Series G, par value $55,000.00, were verified by physical inspection. Bond interest amounting to $1,375.00 was properly accounted for on the books. Recorded cash receipts for the year were traced in total into the bank accounts as deposits and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file. Selective tests were made of the income and expense accounts for the period. It was noted that space was contributed by the JOURNAL to the U. S. Government for advertising Defense Bonds.

Income Statement

The financial result of the Association's activities for the year 1953 was an excess of income over expenses in the amount of $1,097.35 as set forth in Exhibit B. It should be noted that expenses for the period include an amount of $13,964.61 for legal fees incurred in connection with the Audrain County Hospital suit in which the Missouri State Medical Association was named as codefendant.

Balance Sheet

The asset and liability accounts of the Association at December 31, 1953 are presented in Exhibit A, and comments follow on certain Balance Sheet items.

Accounts receivable from JOURNAL advertisers are summarized below as to date of charge.

Month of Charge	*Amount*
December 1953	$1,467.91
July 1953 and prior	310.85
Total	$1,778.76

$1,470.91 of the above total was collected to January 21, 1954.

Unpaid Dues and Assessments in the amount of $3,125.00, offset by a reserve account in like amount, represent $1,985.00 of regular dues of delinquent members carried at December 31, 1953 at the request of the local societies and $1,140.00 of unpaid 1951 special assessments. Other members, with delinquent dues at the end of the year, were dropped from membership in accordance with the by-laws. A summary of unpaid dues and assessments, prepaid dues and a schedule of membership by counties, as shown by the records, is presented in Exhibit D.

Furniture and Fixtures are stated in a fixed amount of $1,000.00; purchases during the year having been charged to expense in lieu of depreciation.

Records and data on file were carefully reviewed for liabilities at December 31, 1953 and it is believed that all current liabilities of substantial amount are included in the Balance Sheet. A contingent liability in the amount of $900.00 is reported in connection with three malpractice suits pending against members—the Association is required to furnish assistance in an amount not to exceed $300.00 in each case, under the provisions of its by-laws.

Advance payments in the amount of $2,788.50 were made by exhibitors in 1953 for exhibit space for the 1954 annual session and these payments will be taken into income when earned in 1954.

General

The following insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage	$2,000.00
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$25,000/50,000.00
Treasurer	Fidelity Bond	20,000.00
Executive Secretary	Fidelity Bond	1,000.00
Employees (Executive Secretary, Field Secretary, and Business Manager)	Endowment Life Policies with Disability Benefits (Cash Value $8,734.11) 3 policies—coverage each	12,000.00
Automobiles of Executive Secretary and Field Secretary	Non-ownership—Bodily Injury	$25,000/50,000.00
	Property Damage	5,000.00

Life insurance policies with retirement insurance benefits for employees, covering the Executive Secretary and Field Secretary, were purchased during the year and are shown in the above schedule.

The Supreme Court has refused to review the decision reached by the Court of Appeals on the Audrain County Hospital Suit. No further action is anticipated and the office of the Executive Secretary advises that all legal expenses incurred in connection with the suit have been paid.

The examination for the year 1953 disclosed that the records of the Association were well maintained in conformity with generally accepted accounting principles, applied on a basis consistent with that of the preceding period.

Yours very truly,
Lennertson & Company,
Certified Public Accountants.

Exhibit A

Missouri State Medical Association
Balance Sheet, December 31, 1953

Assets

Cash:		
Mercantile Trust Company (Treasurer's Account)	$25,606.86	
Mercantile-Commerce National Bank (Secretary's Account)	364.71	
Petty Cash Fund	25.00	$25,996.57
U. S. Savings Bonds—Series G 2½% Cost and Par Value (Maturities 1955—$5,000; 1957—$15,000; 1958—$25,000; 1959—$10,000)		55,000.00
Accounts Receivable—Advertisers		1,778.76
Dues and Assessments Receivable—Exhibit D		
Dues	$ 1,985.00	
Assessments (1951)	1,140.00	3,125.00
Furniture and Fixtures (Stated Value)		1,000.00
Advances for Traveling Expenses		164.66
		$87,064.99

Liabilities

Accounts Payable:		
Supplies and Expenses	$ 2,320.96	
Payroll Taxes	657.42	$ 2,978.38
Deferred Credit to Income:		
Advance Payments by Exhibitors		2,788.50
Reserve for Uncollected Dues and Assessments		3,125.00
Contingent Liability to Members on Three Malpractice Suits—$900.00		....
Reserve for Future Activities:		
Balance January 1, 1953	$77,075.76	
Excess of Income over Expenses for the year 1953 (Exhibit B)	1,097.35	78,173.11
		$87,064.99

Exhibit B

Missouri State Medical Association
Income Statement for the Year 1953

Particulars	General Activities	Journal Publication	Total
INCOME			
Dues Received (includes $1.00 per member annually for The Journal)	$73,110.00	$ 3,175.00	$ 76,285.00
Assessments (year 1951)	80.00		80.00
Rentals—Annual Session Exhibit Space	9,150.00		9,150.00
Subscriptions to The Journal—Non-members		127.20	127.20
Advertising Space—The Journal		23,041.54	23,041.54
Interest on U. S. Savings Bonds	1,375.00		1,375.00
Collection Fees on A.M.A. Dues	701.10		701.10
Total Income	$84,416.10	$26,343.74	$110,759.84

For over 70 years...

One Wing of the Lodge

Specialists in the Treatment of Alcoholic Addiction

Treatment of the "problem drinker" is more than a sobering-up process; it is a rehabilitative procedure which must be tailored to the needs of the individual.

Years of intensive research and specialized clinical experience enable us to follow through in all phases of modern restorative treatment—gradual withdrawal, physical rehabilitation, re-orientation and re-education.

You may refer female as well as male patients—we are also equipped to care for narcotic or barbiturate addiction. Moderate rates; treatment period sometimes shortened to just two weeks.

Registered by the American Medical Assn.
Member of the American Hospital Assn.

We invite your inquiry

THE KEELEY INSTITUTE
DWIGHT, ILLINOIS

EXPENSES			
Salary—Executive Secretary	$ 4,966.67	$ 2,483.33	$ 7,450.00
Salary—Treasurer	1.00		1.00
Office Salaries	16,133.28	8,066.64	24,199.92
Employees' Retirement Insurance Premiums	2,781.48		2,781.48
Office Rent and Light	2,747.84		2,747.84
Postage	1,540.43	735.63	2,276.06
Stationery, Printing and Office Supplies	1,518.06		1,518.06
Directories and Clipping Service	233.00		233.00
The Journal—Paper, Printing, etc.		21,596.29	21,596.29
Cash Discounts to Advertisers		13.73	13.73
Commissions on Journal Advertising		2,072.20	2,072.20
Discounts to Exhibitors	30.00		30.00
Telephone and Telegraph	1,672.10		1,672.10
Insurance—General	145.92		145.92
Fees, Subscriptions and General Expense	1,478.09		1,478.09
Taxes—Payroll and Personal Property	325.83		325.83
Traveling Expense—Executive Secretary	1,152.18		1,152.18
Traveling Expense—Field Secretary	2,371.02		2,371.02
Traveling Expense—General	472.73		472.73
Committee and Meeting Expenses (Exhibit C)	21,883.29	11.88	21,895.17
Equipment Purchases in lieu of Depreciation	1,265.26		1,265.26
Legal Expense	13,964.61		13,964.61
Total Expenses	$74,682.79	$34,979.70	$109,662.49
Net Income or (Loss) for the Period	$ 9,733.31	$(8,635.96)	$ 1,097.35

Exhibit C

Missouri State Medical Association
Statement of Committee and Meeting Expenses
For the Year 1953

Annual Session		$ 7,050.91
Council Meetings and Councilor's Expenses	$ 5,757.82	
Delegates to A.M.A.	863.30	
Women's Auxiliary	715.01	7,336.13
Committees:		
Emergency Medical Service	$ 127.30	
Conservation of Eyesight	37.51	
Rural Medicine	705.44	
Health and Public Instruction	410.00	
Public Policy and Relations	5,372.16	
Scientific and Post-graduate Work	337.08	
Tuberculosis	83.84	
Infant Care	133.10	
Maternal Welfare	44.73	
Mental Health	37.57	
Alcoholism	20.06	
Cardiac Disease	150.74	
American Medical Education Foundation	36.72	
Publication	11.88	7,508.13
Total		$21,895.17

Exhibit D-1

Missouri State Medical Association
Dues Receivable and Membership by Counties
December 31, 1953

Counties	Membership				Unpaid Dues		Prepaid Dues
	Total	Active	Junior	Honor	(A) Regular	(B) Special	
Andrew	6	5	1		$ 40.00		
Audrain	17	13	2	2			
Barton-Dade	9	7		2			
Benton	3	1		2			$ 25.00
Boone	57	51	1	5	65.00	$20.00	
Buchanan	101	79	6	16			
Butler-Ripley-Wayne	32	27	3	2	40.00		
Callaway	19	14		5			
Camden	1	1					
Cape Girardeau	44	36	1	7	25.00	10.00	
Carter-Shannon	3	2		1			50.00
Chariton-Macon-Monroe-Randolph	35	26	1	8			(500.00 (25.00N
Clay	38	36	2				375.00
Clinton	7	5	1	1			
Cole	40	36		4	25.00		
Cooper	15	14		1	75.00		50.00
Dallas-Hickory-Polk	9	8		1			
Dunklin	27	21	4	2	135.00	30.00	
Franklin-Gasconade-Warren	28	26	1	1			
Grand River (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	64	51	3	10	130.00	20.00	525.00
Greene	139	119	10	10	25.00	20.00	
Henry	13	11	1	1			
Holt	4	3	1				
Howard	7	6	1				
Jackson	712	568	51	93	175.00	20.00	
Jasper	77	57	3	17		10.00	775.00
Jefferson	16	15		1			
Johnson	12	8	2	2	25.00		
Laclede	13	13					300.00
Lafayette-Ray	26	20	2	4			
Lewis-Clark-Scotland	4	4					100.00
Lincoln-St. Charles	28	22	5	1	87.50		
Marion-Ralls-Shelby	29	24	1	4			
Miller	3	3					75.00
Mineral Area (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)	31	24	2	5		20.00	
Moniteau	6	5		1			100.00
Moniteau							25.00N
Montgomery	4	3		1			75.00
Morgan	5	4	1				
Newton	13	12		1	25.00	10.00	175.00
Nodaway-Atchison-Gentry-Worth	22	19	2	1	45.00		237.50
North Central (Adair-Schuyler-Knox-Sullivan-Putnam)	19	9		10			
Ozarks (Barry-Lawrence-Stone-Christian-Taney)	38	29	3	6	50.00		
Pemiscot	21	13	4	4	15.00		
Perry	12	9		3			200.00
Pettis	31	23	2	6			
Phelps-Crawford-Dent-Pulaski	26	21	4	1	12.50	20.00	12.50
Pike	12	6	2	4	12.50		
Platte	7	5	1	1	15.00		100.00
St. Louis Medical Society	1,281	1,051	124	106	575.00	880.00	25.00
St. Louis Medical Society							400.00N
St. Louis County	325	294	12	19	262.50	50.00	37.50N
Saline	25	20	3	2			
Semo (Stoddard-New Madrid-Mississippi-Scott)	41	29	2	10	50.00	20.00	
South Central (Howell-Oregon-Texas-Wright-Douglas-Ozark)	26	20	2	4	50.00	10.00	(187.50 (12.50N
Webster	3	2	1				50.00
West Central (Bates-Cass-Cedar-St. Clair-Vernon)	43	32	5	6	25.00		600.00
Total	3,629	2,962	273	394	$1,985	$1,140.00	$5,037.50

(A) Delinquent dues of members carried at December 31, 1953 at the request of local societies.

(B) Unpaid 1951 Special assessments at December 31, 1953.

(N) New Members—payments received from applicants in 1953 for membership effective January 1, 1954.

Budget for 1954

Salaries	$38,750.00
Journal Expense	27,000.00
Postage, printing and stationery	4,500.00
Travel—Executive Secretary	1,300.00
Travel—Field Secretary	2,800.00
Telephone and telegraph	1,600.00
Office rent and light	3,000.00
Meetings and committee expense	17,700.00
Defense	500.00
Scientific and Postgraduate Work	1,000.00
Woman's Auxiliary	1,000.00
Public Relations	7,000.00
Insurance Annuities	2,780.00
Miscellaneous general expense	3,000.00
Furniture and fixtures	1,000.00
Social Security Tax	640.00
Legal expense	1,200.00
Total	$114,770.00

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MISSOURI MEDICINE

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Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, starting June 7
Surgical Anatomy & Clinical Surgery, Two Weeks, starting March 22 and June 21
Surgery of Colon & Rectum, One Week, starting April 12
Basic Principles in General Surgery, Two Weeks, starting March 29
Gallbladder Surgery, Ten Hours, starting April 12
General Surgery, Two Weeks, starting April 26
Fractures & Traumatic Surgery, Two Weeks, starting June 7

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Curiosa et Trivia

William B. McCunniff, M.D.

The world's only national anti-vivisection law, adopted early in the Hitler regime, is still in effect in Germany—a country not now noted for significant scientific progress.

The New Yorker reports an unnamed NYC pediatrician who has in his office tongue blades in lemon, lime, orange and cherry flavors.

There will be at least one mortality in every three thousand transfusions.

Discoverer of exophthalmic goiter (still a baffling disease), Irish physician Robert J. Graves, has been dead over one hundred years.

A detail call on a physician represents an average expenditure of $6.00 on the part of the sponsoring company.

The son of a family too poor to put him through medical school, William Morris left the village school at Cowley, England, at age 16 and was apprenticed to a bicycle repair man at a weekly wage of 75 cents. A few months later he opened his own bicycle shop, later acquired great wealth as an automobile manufacturer and became Lord Nuffield. Never forgetting his original love for medicine, he gave more than $73 million to found the Nuffield Institute for the Advancement of Medicine.

In 1952, 31 per cent of all prescriptions were for anti-infective drugs. The average cost over the U. S. was $2.60 per prescription.

Noted in the mail: a "specialty" organization to which, we venture, few MoMedics belong—located at 185 North Wabash Ave., Chicago, The Poultry and Egg National Board.

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Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-05 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Missouri Medicine in Review

LEO H. POLLOCK, M.D.

APRIL 1914

State dues have been raised to $3.00.... G. Adams gained local fame in Joplin. He had a thriving business in plasters: sold for $2.00 each and produced such agony that the victim of the white plague forgot about his lungs and thought only of his back.

The St. Louis Medical Society assisted the new St. Louis *Star* to unearth the record of quacks and found a trail of villainy that astounded the community. Fraud and murder are some of the serious crimes alleged to have been committed by some of these fakers in their varied careers. They received telegrams of congratulations and encouragement from M.S.M.A. President Dr. E. H. Miller, A.M.A. President J. A. Witherspoon, A.M.A. president-elect Victor C. Vaughan, J.A.M.A. editor George H. Simmons, and from *Harper's Weekly* editor Norman Hapgood.

Marriages: C. H. Schutt, M.D., St. Louis, to Miss Alice Bock; W. Glen Miller, M.D., Morrisville, to Miss Edith Dixon; H. L. Wichmann, M.D., St. Louis, to Miss Pearl MacCoy.

APRIL 1929

Dr. Albert Brechet, director of L'Institute d'Anatomie of Brussels, visited in St. Louis. He was deeply impressed by the close relation between research and treatment in teaching hospitals of the U. S. "Every hospital patient seems to have the advantage of scientific research laboratories. In Europe ... the individual patient in hospitals does not receive its immediate benefits."

Dr. Barney Brooks, Vanderbilt University, delivered the annual Dr. John T. Hodgen lecture. Dr. Brooks was formerly connected with Washington University Medical School. Dr. H. S. Maxwell, newly elected president of the Nodaway County Medical Society, died unexpectedly.

APRIL 1944

J. F. Roberts, M.D., Bolivar, Missouri's oldest practicing physician, died early this year. He was 93 years old, had practiced for seventy-two years, and was active until two or three weeks before his death. He was graduated from the Missouri Medical College, St. Louis, in 1872.

The South Central Counties Medical Society has been divided into the Howell-Oregon-Texas County Medical Society with Dr. E. C. Bohrer, West Plains, as president, and the Wright-Douglas County Medical Society with Dr. R. W. Denney of Mountain Grove as president. The 87th Annual Sessions of the M.S.M.A. will meet in Kansas City April 23-24-25.

Dr. and Mrs. J. D. Smith, Shelbina, celebrated their seventy-first wedding anniversary early this year.

Pettis County Pot Pourri

C. GORDON STAUFFACHER, M.D.

After delivering an unmarried girl, I asked her how she happened to be a mother although unwed and she replied that it happened at night and she couldn't see what she was doing.

Which reminds me of the definitions of a fashionable wedding—"When the father sticks a rose in his shot gun."

This afternoon a sweet young girl came to my office complaining of nausea and vomiting.

"Are you married?" I asked.

"Yes," she said blushing prettily, "Just one week."

"I guess that rules out pregnancy as your trouble"—I stated.

"Why?" she replied surprisingly, "We've been courting longer than that."

I had just finished a urinalysis for a young man and was reporting to him that I had found albumin, bacteria and white blood cells, when he surprisingly asked, "Heck Doc, wasn't there any urine in it at all?"

My five year old has a penchant for repeating poetry. Her latest has been Ogden Nash's whimsical bit.

"Some primal termite knocked on wood and
tasting it found it good
So that's the reason Cousin May—Fell through
the parlor floor today."

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0.2 Gm. (3 grains) scored.

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Missouri Academy of General Practice

William J. Shaw, M.D.

At least four Missouri general practitioners were well rewarded by attending the Fiftieth Annual Congress on Medical Education and Licensure in Chicago on February 7-9, 1954.

The Missouri State Board of Medical Examiners is a member of the Federation of State Medical Boards of the United States. The Missouri Board, including new members Harry Klein, M.D., St. Louis, and Elvin D. Imes, M.D., Maryville, general practitioners, attended all meetings.

Convening with the State Medical Boards were the Council on Medical Education and Hospitals of the A.M.A., and the Advisory Board for Medical Specialties. These three groups constitute the Congress on Medical Education and Licensure. The current meeting convened for essentially the same reason as the first meeting, half a century ago, "For the purpose of bringing together the various examining and licensing powers of the states and territories, to secure mutual interchange of ideas and counsel."

The speakers included Edward J. McCormick, M.D., President, A.M.A.; Robert A. Moore, M.D., St. Louis, President, Advisory Board for Medical Specialties; Frank B. Berry, M.D., Assistant Secretary of Defense; U. R. Bryner, M.D., President, American Academy of General Practice, and Roscoe L. Pullen, M.D., Dean, University of Missouri School of Medicine. Especially pertinent to the Missouri members was an address by S. D. Ezell, M.D., N. Y. Board of Medical Examiners. He emphasized the deficiencies in foreign medical education at present, and urged their correction before foreign graduates are licensed in this country.

An interesting, informative paper, "Distribution of Physicians by Medical Service Areas," by Frank G. Dickinson, Ph.D., (A.M.A.), approached this controversial subject using trade areas instead of geographical lines as a basis for study.

With the current thinking of these three groups as outlined, members of the Missouri Board of Medical Examiners were fortunate in having an opportunity to hear a discussion of the relation of medical education and hospital internship to licensure, the impact of military medical needs, the evaluation of credentials submitted by foreign medical graduates and the report and recommendations of a special committee on licensure problems.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Practicing medicine out here at the Crossroads most of the time is long hard work and once in a while gets to be a chore. Occasionally it gets awful tiresome but about that time some patient shows the sort of gratitude that makes you feel good and warm inside and all rested up like you had a good nights sleep. Then you are all ready to forget all about moving back to the farm.

What gets most tiresome is reading what some of our brother members have to say about us family doctors. A few years ago when we organized so as to provide some means of keeping up with the progress of medicine they said it wouldn't last. Now it has, and we are getting the hell educated out of us.

The best education I know is to watch how some of these specialists work. You can learn how to do a lot of things. But most important of all you can find out how not to do things too. Here is a fer instance.

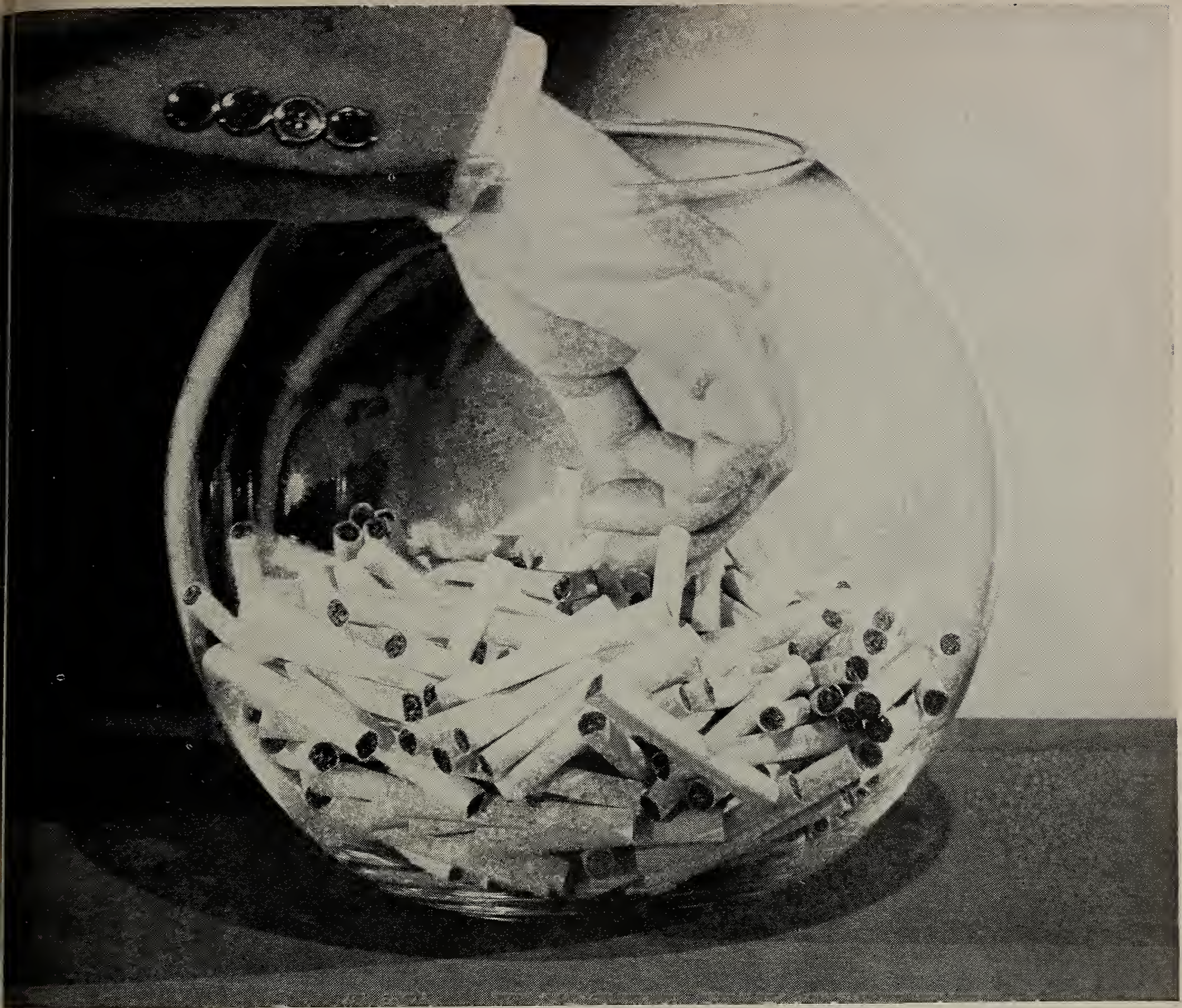
Couple weeks ago a young woman that I growed up with stopped in. After she got married she moved to the city. She discovered a lump in her breast and wanted to know what to do. I told her what she ought to do, gave her the name of what I thought was a good surgeon and a friend of mine in the city and wrote her a note of introduction.

Well, she made an appointment and kept it, passed over the note to the receptionist and was mildly amazed when it was immediately filed in No. 13. Fore long she was ushered in, put on a table and draped. The surgeon came in without so much as a howdy, and the conversation went like this.

"Do you want it out?" "Doctor, that's what I came to you to find out." "Well, when you make up your mind come back." Now we had already helped her make up her mind. She left and didn't come back but next day showed up here.

Rare isolated instance—sure. But one in a lifetime is too often. It just adds emphasis that what the best public relations doctors can get can't be bought from people who ain't doctors. It's just got to start with the doctor himself and right in his own office.

Regards,
Your Nephew,
Pete



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"Of His Bones Are Coral Made"

History, and the men who made history, pose a fascinating challenge to many people. To reconstruct their lives, their habits, their modes and manners, with but fragmentary evidence, is fun, work, a life-time profession, or, as in the case of confrere, Paul Titterington, St. Louis, an absorbing hobby.

Paul Titterington, M.D.

As a child in Illinois, his interest in archaeology was first stimulated by Indian arrowheads. His father, a physician, permitted him to collect and keep them in a goldfish aquarium placed on a table in the office reception room. So great was his interest in arrowheads, the fish soon became overcrowded; the young archaeologist was ordered to remove his collection of Indian lore from the tank!

By the time he finished high school, Dr. Titterington had collected around 400 reasonably good specimens. During medical school years there was an enforced hiatus in this activity.

After graduation, visits to museums in various cities, and a growing acquaintance with other archaeologists, proved there was a scientific side to this hobby. Many technics on village-site collecting, excavations, and the keeping of records (all acceptable to professionals) were imparted to Paul by W. K. McKern, Director of the Milwaukee Public Museum.

As a professional, Dr. Titterington works a small area intensively, rather than a large area superficially. Thus, he has concentrated on four west central Illinois counties.

"Between fifteen and sixteen hundred burials have been exposed. One thousand of them represent one culture from one county. Forty per cent of this one group died in infancy up to puberty. Very few lived beyond forty. The teeth were in direct proportion to the individual's age; most bone diseases seen today can be duplicated from the Indian material. All skeletal material has been sent to the U. S. National Museum because its scientific value can be utilized best at a central collecting station for such materials."

"All of the things found in the village sites and graves, diagnostic of the culture they represent are in a basement museum in my home where they are available for study by the serious minded students from the universities, or for a casual glance by the social caller."

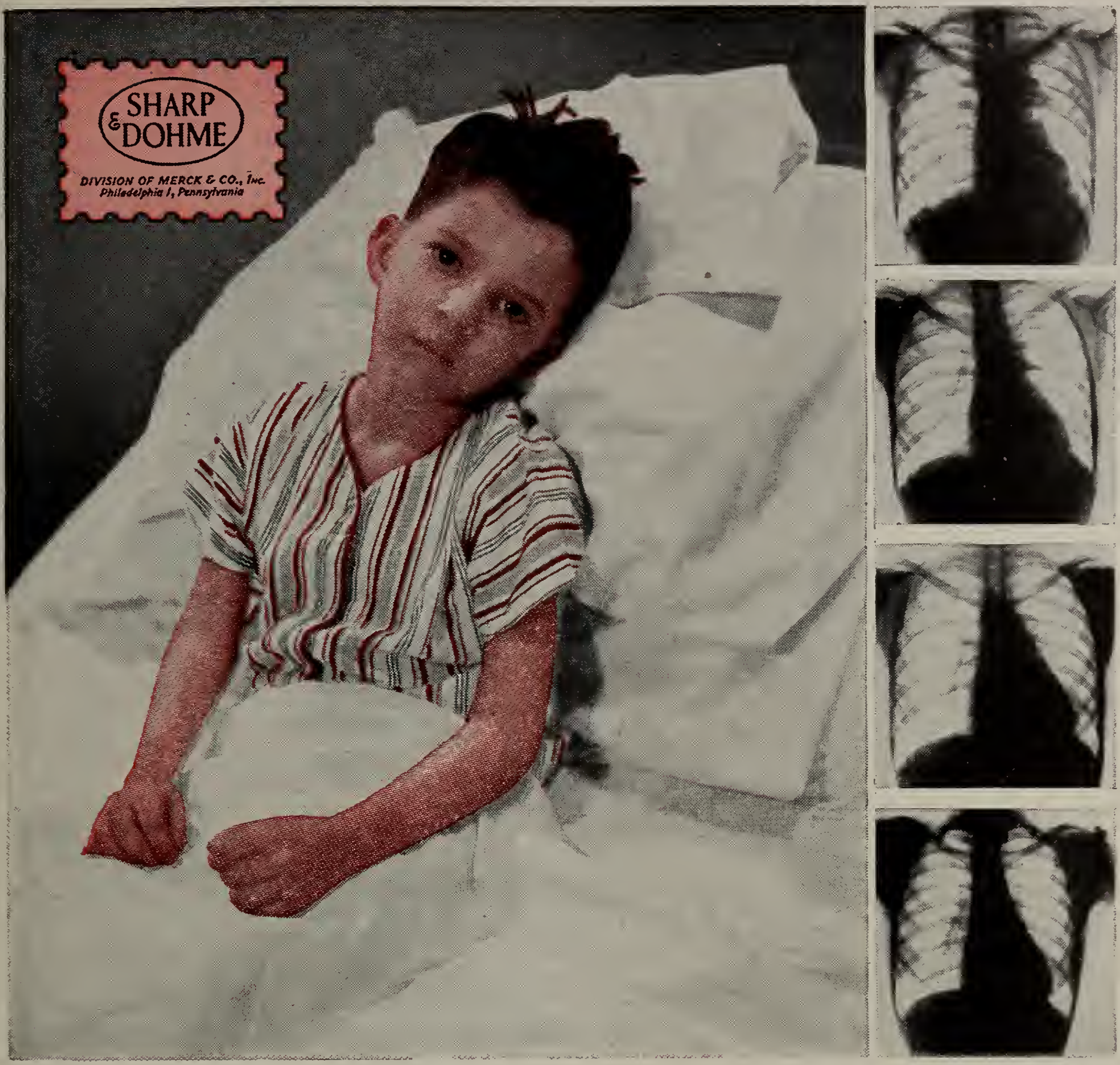
"My pleasure has been twofold. First, the actual finding of the materials in the field, their cleaning and mending, and the preservation of the skeletal and other more destructible materials. Second, sitting in with the professionals and listening to them fit my most recent efforts into the general archaeological picture of the area."

(We need leads on members, other than in St. Louis and Kansas City, who have unusual, unique hobbies. If we must conduct this series solely from these two areas, we will. We would prefer to keep Missouri Medicine a representative Journal. Please help us to cover all of Missouri with these hobby articles. V. T. W.)

Capsule Clinics

Irving A. Wien, M.D.

- The complications of diverticulitis of the colon are: simple abscess with slow or abrupt perforation, peritonitis, formation of fistulas, obstructions, and coincidental carcinoma. Lenhordt, C. G., and Fleming, J. P.: J. Internat. Col. Surg. **19** (February) 1953.
- The recurrence rate of ulcer following gastroenterostomy for duodenal ulcer formerly was given as varying between 5 to 20 per cent and has been reported as high as 24 per cent. Marshall, S. F., and Lamphier, T. A.: Lahey Clin. Bull. 8 (July) 1953.



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All Hydrocortone Tablets are oval-shaped and carry this trade-mark:

With Our Auxiliary

Mrs. C. Alex (Helen) McBurney, *President*

Dr. E. Claude Bohrer, President of the Missouri State Medical Association in 1953-54, had that indefinable something all great men have in common; an unassuming manner, dignity, genuineness, kindliness, honesty and intelligence.

In discussing a problem with him, he would go immediately to the heart of it. There was no waste motion.

In his busy life, serving others, he never had time to think of himself. He was looking for truth as it could best serve the medical profession. He loved his profession and was deeply concerned about the many problems confronting it and the apathy with which a part of the profession met these problems.

So it is with great personal, as well as professional loss that we in the medical profession give up Dr. E. Claude Bohrer. He was a friend of the Woman's Auxiliary remarking many times of its undeveloped potentialities in serving the medical profession, especially in the field of public relations and hoped to see the day when we would receive more recognition by the Missouri State Medical Association.

Dr. Bohrer was an idealist but a doer as well, dedicating himself to the things that were important to him; his profession, his family and his friends. American medicine has lost a real friend in Dr. E. Claude Bohrer.

Woman's Auxiliary State Convention Program

The tentative program has been announced by the Woman's Auxiliary to the St. Louis Medical Society for the annual meeting of the Woman's Auxiliary to the Missouri State Medical Association to be held in St. Louis, April 4 to 6, at the Statler Hotel.

Sunday evening, April 4, a Buffet Supper will be given for the Doctors and their wives. Mrs. Harold H. Feller is Chairman for this opening event. Mrs. Edmund S. Beckette will assist her. The time and entertainment will be announced later.

Monday, April 5, Luncheon, honoring Past State Presidents, will be served in the Missouri Room with Mrs. Warren Bowersox as Chairman assisted by Mrs. Harold E. Walters. A Spring Millinery Show will be presented by Bes Mansfield, Designer from the Fashion Millinery School.

Tuesday, April 6, Luncheon, honoring the National President, Mrs. Leo J. Schaefer, will be held in the Ballroom. Mrs. Leo P. FitzGerald is Chairman and Mrs. Leroy Sante is her Cochairman. A most interesting Musical Program is being planned and will be announced in detail at a later date.

Registration will begin Sunday afternoon, April 4, on the north Mezzanine of the Statler Hotel.

Following is a list of the Committees:

General Chairman: Mrs. Martin J. Glaser; Cochairman: Mrs. Theodore Greiner.

Advisory Committee: Mrs. Andrew B. Jones, Mrs. A. H. Conrad, Jr., Mrs. Frederick S. Haeberle.

Courtesy Committee: Chairman: Mrs. Flavius G. Pernoud, Sr., Cochairman: Mrs. Walter C. G. Kirschner.

Credentials Committee: Chairman: Mrs. Harold K. Roberts, Cochairman: Mrs. Charles S. Sherwin.

Decorations Committee: Chairman: Mrs. Robert D. Sanders, Cochairman: Mrs. John W. Daake.

Favors Committee: Chairman: Mrs. Henry A. Uhlemeyer, Cochairman: Mrs. Y. H. Bond.

Finances Committee: Chairman: Mrs. I. G. Tremain, Cochairman: Mrs. Oliver E. Tjoflat.

Headquarters Committee: Chairman: Mrs. Roy C. Dripps, Cochairman: Mrs. Joseph E. Carney.

Hostess Committee: Chairman: Mrs. Lilburn C. Boemer, Cochairmen: Mrs. Gray Jones, Mrs. Flavius G. Pernoud, Jr.

Information Committee: Chairman: Mrs. E. Eugene Brown, Cochairman: Mrs. Bernard T. Koon.

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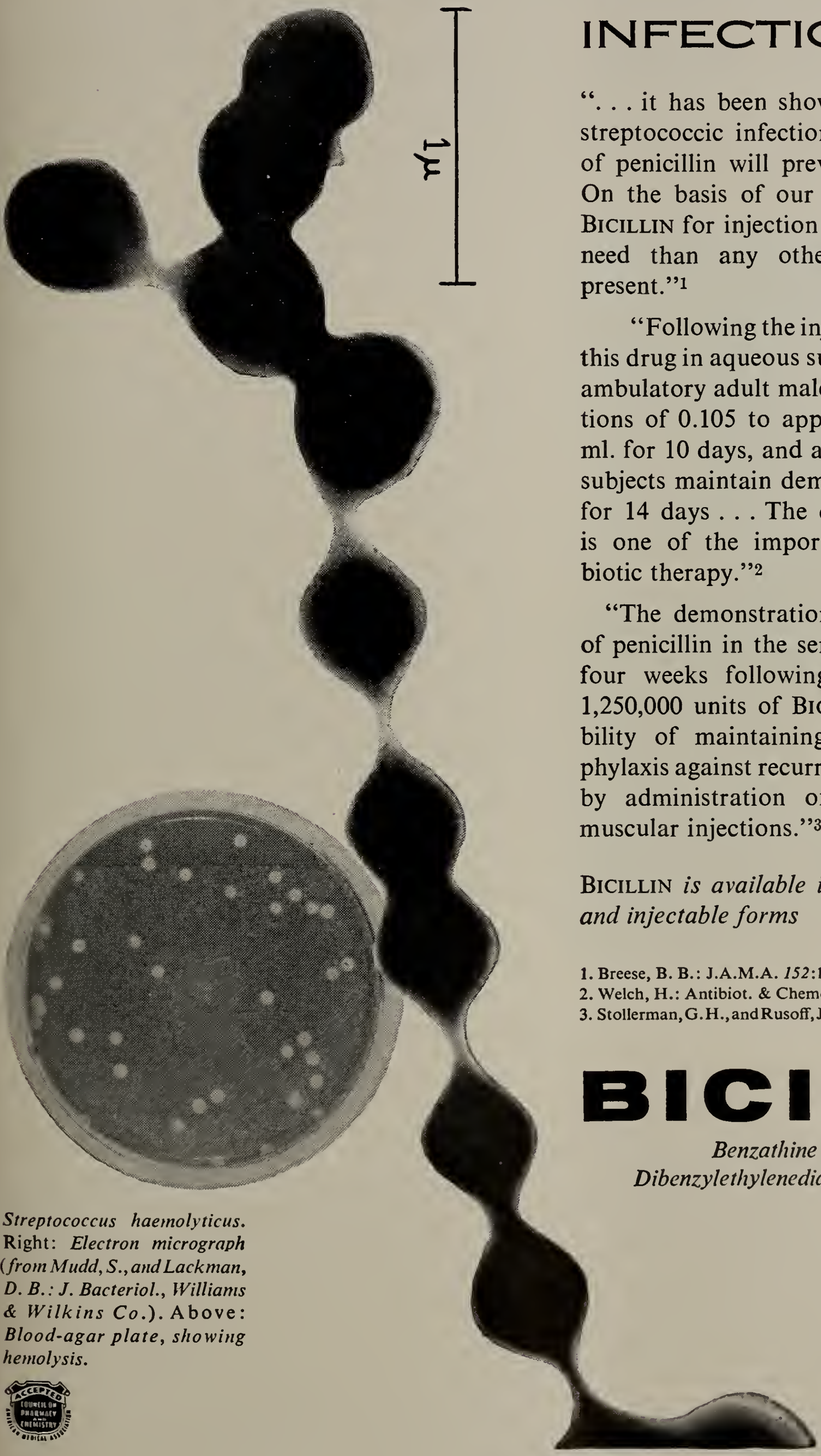
The members of the Woman's Auxiliary would like to take this opportunity to cordially invite the wives of the Doctors throughout the State.



Streptococcus haemolyticus. Right: *Electron micrograph (from Mudd, S., and Lackman, D. B.: J. Bacteriol., Williams & Wilkins Co.).* Above: *Blood-agar plate, showing hemolysis.*

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Guest Editorial

THE VOLUNTARY WAY

Fletcher C. Kettle, *Director of Organization and Administration, National Society for Crippled Children, Chicago, Ill.*

During the last several decades significant progress has been taking place in the care and treatment of our nation's crippled. Along with it has gone a slow but marked change in public acceptance of those who have handicaps of various kinds. Another important development in the same period has been the broadening and accentuating of the American concept of voluntary assumption of responsibility for the health and welfare of the people of this nation, as opposed to compulsory plans.

Fletcher C. Kettle

All of these important advances have been the result of the cooperative efforts of a number of organizations and agencies, among them American medicine, the rehabilitative professions, education and voluntary groups such as the National Society for Crippled Children and Adults.

Working together with one objective in view, these disparate organizations have succeeded in proving that crippled children, with adequate early treatment, can live lives closely approximating those of other children. They have demonstrated beyond a doubt that the successfully rehabilitated adult is an asset to business, industry and the professions and a valuable economic factor in his nation's life.

Throughout these several decades, the National Society for Crippled Children and Adults, and its affiliates in the forty-eight states, District of Columbia, Alaska, Hawaii and Puerto Rico, have taken the lead in coordinating the work of many professions through centers in which crippled children and adults can receive the treatment, training and education they must have to live rewarding, worthwhile lives.

Before the National Society and its affiliates undertook their great nationwide task, there was only a handful of such centers in the United States. Today, under its aegis there are 874 such facilities providing unduplicated services.

At the turn of the century the crippled lived in seclusion and dependence. Today, hundreds of thousands annually receive treatment of various kinds through these centers which enable them to live happy, useful lives. All of the services provided in these centers are supported by the voluntary contributions of the American people through Easter Seals. Their scope is limited only by the funds contributed.

This year will see the 21st annual Easter Seal appeal for funds to support a program which includes diagnostic clinics, treatment and training centers, physical, occupational and speech therapy, special education, convalescent hospitals, sheltered employment, counseling and special camps.

The support of America's doctors is important to this great cause. They lend their invaluable help to the counseling and direction of the programs of the Easter Seal societies. They work unselfishly in the hope that these programs may expand to embrace far greater numbers of crippled. It is to be hoped that their support through Easter Seals will be as generous.

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*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

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President's Comments

As a result of an untimely and saddening turn of events, the honor of serving as your President was assigned to me at a meeting of the Council of the Missouri State Medical Association on February 6.

At the forthcoming Annual Session in St. Louis—which will be just a few days in the offing when this issue of Missouri Medicine reaches you—I shall perform one of the most rewarding functions of the office. I refer to the job of presenting to the House of Delegates at its first meeting during the Annual Session a review of the accomplishments of the past year.

The report I give, however, will not in any sense be mine. Here in this my first and my last presidential message in Missouri Medicine, I wish to point out to every member that there has been little left to do to complete the term of office of the late E. Claude Bohrer. In the past year, your Association has taken many important steps toward meeting the objectives of the medical profession of Missouri and Dr. Bohrer saw the beginning and the completion of almost every one of the really big and significant jobs in the year's program.

So, the report of the accomplishments of the year will really be his report. It is one that is much to his credit—and, as I am sure he would say himself, to the credit of the other officers of the Association, the Council, the committees and the staff members.

Another man who has taken an active part in the planning and development of the Association's program is President-Elect H. E. Petersen. His long experience on the Council and his work during the year with Dr. Bohrer and the Council make him exceptionally well qualified to become your President in what may be one of the Association's most eventful years. I consider it an honor to be the man who will install him in your highest office.

I look forward to seeing you at the meeting in St. Louis.
Guy N. Magness, M.D.,

Of This and That

Mark M. Marks, M.D.

It is a fretful and worrisome thing to watch the trend in many of the sales methods of today. To the persuasive voice of radio, television adds its talents to entice more money from the gullible many. Truth is treated as a plague, to be avoided at all cost and never to be mentioned. Anyone dressed in white offers advice in the best nursey manner or should he be a bit grey at the temple he dispenses medical misinformation with the gracious aplomb of the sagacious clinician.

The worse of the lot are the cigarette purveyors, who, through the beguiling vocalizing of toothy damsels, prancing boxes, graphs, gadgets and gimmicks struggle to prove their specific noxious nostrums superior to good fresh air. Their offerings come in assorted lengths, with and without filters of dubious value, with more or less nicotine, with menthol to mask the smokey flavor or with an offering of coupons that enable one, after inhaling to a rich brown, to receive a set of worthless crockery—or something else that can be thrown at the alley cats.

There are those who extol the questionable virtues of chlorophyll (how 'bout the goat that reeks on yonder hill?), the magic of wool fat, dog biscuits, breakfast foods and a jillion other things worthy as well as worthless. For watching a phony wrestling match, you can get a full course in weight reduction to correct your blimp-like self to a slim zephyr. By observing the antics of a sad-eyed, huskey-voiced humorist, you may enhance your knowledge of tea bags and sundry soups and such.

Within the sanctum of big business everything goes, and the devil take him who dares to speak out against this abuse of truth. As no man has the right to yell "fire" in a crowded theater, by the same token he should not abuse the privilege of communication by the use of falsehood ballyho and hokum. Our state and federal laws seem too ponderous to protect the willing weak who believe that whatever is written or said must be the gospel truth. Witness the flood of horse salts that were foisted on the unsuspecting public a few years ago. Still more recently an enterprising former legislator peddled a spurious tonic with all the freebooting abandon of an irresponsible carnival barker, along with the trappings of a parade of Hollywood personalities, who, for a price, lent themselves to the iniquity.

When will the villainous side of publicity call a halt? Or does it require more than one outraged menial to shout in the wind? Maybe Barnum was right.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 April, 1954 Number 4

Traumatic Amputations of Fingers

G. N. LASSAR, M.D., *St. Louis*

Because of an injury, a finger may be lost. For the want of a finger, the function of a hand may be lost and, for the want of a hand, a man's job may be lost. Fortunately this is not the usual sequence of events, but the number of disabling injuries which occur as the result of thumb and finger injuries is enormous. The National Safety Council reports 375,000 of these accidents in 1951 from industry alone.[1] Obviously it is not always within the province as surgeons to prevent these injuries. However, surgeons certainly are in a position, by proper surgical handling of these cases, to appreciably diminish the percentage of disability.

GENERAL PRINCIPLES OF TREATMENT[2, 3]

As most of these accidents are industrial, it is important that plant personnel be instructed as to the immediate care of these injuries. Probably the simplest measure is to apply a sterile dressing directly on the wound, secure it with a roller bandage or whatever might be available, elevate the hand and send the patient to the doctor. Because of the time lag, shortage of hospital personnel and overcrowded facilities, it is preferable to treat these patients in the office and hospitalize them only if the patient has too much discomfort or complications. However, such an office must be staffed and equipped to care for these cases.

The following routine is used in dealing with any hand injury: On arrival the patient is given a sedative, placed on the operating table with the arm supported on an arm board. With the nose and mouth of the examiner covered by a mask, the wound is inspected to determine the extent of injury. At that time a decision is made as to the method of repair. This will be discussed further in detail. The wound is covered by a sterile dressing and, if the bleeding is vigorous, a tourniquet is applied at the base of the finger. The cuffs of discarded rubber gloves or soft rubber catheters serve admirably for this purpose. The hand is then washed with soap and water and shaved. Ether and benzene are used as grease solvents. The base of the involved finger is blocked with two per cent procaine (without adrenalin). Not only is a bloodless field created, but anesthesia usually can be maintained for as long as an hour. Only after anesthesia is induced is the area immediately surrounding the wound carefully cleansed with a detergent and sterile water.

CHOICE OF METHOD OF REPAIR

In general there are three methods of repairing an amputated phalanx:[4]

1. Simple closure utilizing local tissue for covering the exposed area.
2. Full thickness or split thickness grafts.
3. Pedicle flaps.

The large number of repeated successes by various methods of treatment suggests that no one technic is preferred for all cases. Selection must be made on the individual problem at hand.

1. *Simple Closure.*—Simple closure is certainly the method of choice if the tissues lend themselves to easy coaptation without sacrificing the length of the finger. Under certain circumstances it may be more advantageous to sacrifice finger length in favor of rapid healing and quick return to work. There is certainly no point in saving a badly traumatized finger or any portion of it if the end result decreases the function of the hand, or if the attempt to save a finger jeopardizes the function of the hand. If this method is elected, the following principles should be adhered to:

a. The bony phalanx should be removed sufficiently to allow easy closure.

b. The end of the stump should be covered with the thick, tough palmar skin whenever possible.

c. Tendons should not be sutured over the stump as this will limit the excursion of the good fingers. Rather, they should be allowed to retract and reattach themselves spontaneously. An exception to this rule is in the case of multiple amputations.

From the Department of Surgery of Jewish Hospital of St. Louis and the Department of Surgery of St. Louis University.

d. The digital nerves should be cut off cleanly about 1 centimeter above the stump to avoid painful neuroma formation.

e. If the amputation is performed at an interphalangeal joint, the cartilage should be removed and the flare of the phalanx rounded off with a rongeur.

f. For amputations at or proximal to the proximal interphalangeal joint, some have recommended that the digit be sacrificed to the metacarpal-phalangeal joint or even higher.[5, 10]

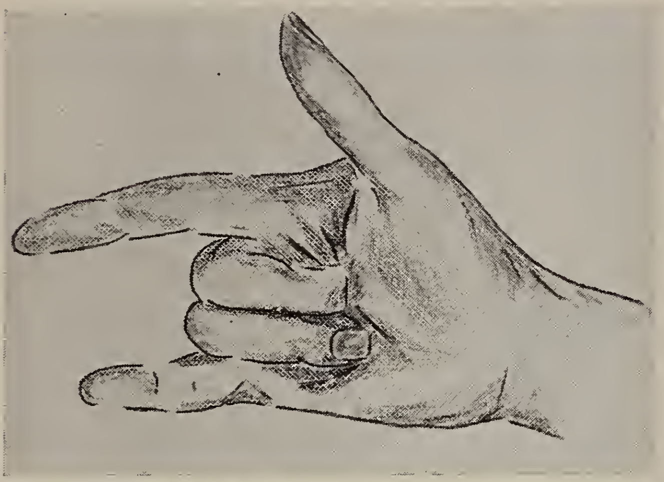

Fig. 1. Drawing (redrawn from Bunnell "Surgery of the Hand") of flap grafts applied to cover amputations of the tips of the ring and middle fingers. The disadvantages of this method are: (1) Immobilization of the fingers in this position for at least three weeks may result in permanent flexion deformity. (2) The scars in the palm of the hand may remain painful and tender.

In general it is better to leave as much of the finger as possible. Even a small nubbin of the index or little finger may prove to be of inestimable value for grasping heavy objects. Loss of the metacarpal head weakens a hand appreciably and certainly therapy which removes the metacarpal head has no place in the immediate care of these injuries. If one is offended by the cosmetic appearance, then the hand can be narrowed at a later date by removal of the metacarpal. Under certain circumstances in which one's work requires a precise pinching mechanism rather than grasping, the remaining protion of a proximal phalanx may get in the way and should be removed.

If this method of closure is not applicable, then one must consider other methods.

2. *Free skin grafts.*—The full thickness graft, though desirable, should be applied only to a clean, smooth surface. The practice of using skin removed from the amputated segment, if the latter can be salvaged, sounds attractive. This practice has not proved too successful and, unless conditions are optimal, it is best to use another method.

A split thickness graft can be obtained readily with a sharp razor blade. The objection to this type of repair is that it may result in a sensitive stump which does not tolerate the abuse of ordinary working conditions. This can be somewhat alleviated by cutting a thick graft. The graft generally will take if one can avoid burying too much suture material and prevent the formation of a hematoma beneath the graft. Before the graft is applied, the tourniquet is released to check for vigorous bleeding. Only spurting vessels are ligated. The tourniquet is then secured and the graft sutured in place over a bloodless field. The sutures are left long to be tied over a gauze stent. Vaseline mesh gauze is applied directly over the graft. A small piece of foam rubber is placed over the stent and a snug dressing applied. The finger is immobilized on a splint and, only after the dressing is completed and the hand elevated, is the tourniquet released.

3. *Pedicle grafts* (Figure 1).—Numerous textbooks and articles describe in detail the technic of using a palmar flap for injuries of the distal phalanx.[5, 6, 7] Likewise, flaps from the opposite arm or abdomen are of more academic interest than practical use. Although these methods sound appealing, they have almost entirely been abandoned for the following reasons: (a) Any pedicle flap method requires at least three weeks of immobilization and it is frequently ten to twelve weeks before the individual is able to return to work. By other methods the individual may do light work in about two weeks and return to regular work in usually less than six weeks.[8] (b) The period of immobilization required for a pedicle graft is so long that permanent stiffness of the finger is a frequent complication. This is particularly true of palmar pedicle flaps.

Transfer pedicle flaps from adjacent fingers are more applicable than those mentioned previously, but these flaps are best used to cover important structures in traumatic defects or avulsions rather than amputation stumps.

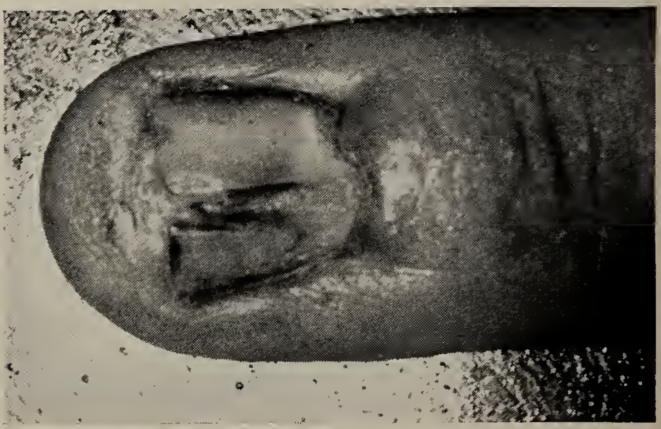

Fig. 2. Photograph showing a common nail deformity one year following an injury to the nail and nail bed. These deformities may be annoying and can frequently be prevented by immediate repair of the nail.

Spontaneous epithelization probably deserves more popularity than the profession is willing to give it. When an amputation stump is merely treated conservatively with simple dressings, one is sometimes amazed, not only by the rapidity with which it heals, but also by the excellent cosmetic result. This method is used for superficial defects and for those wounds which seem to be badly soiled. If healing progresses satisfactorily, a secondary closure can then be done.

So far, various methods of repairing amputations in light of the surgical problem at hand have been discussed but, in considering the treatment of a finger, one must not lose sight of the main objective, namely, the treatment of the patient. In other words, fit the repair to the patient and not the patient to the type of repair. Under identical surgical conditions one might choose to preserve finger length by a pedicle graft if the welfare of an individual depended on this finger, such as a musician, a surgeon or even to satisfy a woman's vanity. On the other hand, a laborer, supporting a large family and anxious to return to work as soon as possible, would be better off with a simple stump revision and immediate closure.[6] When there is any doubt, the problem is presented to the patient to get his viewpoint.

AMPUTATIONS THROUGH THE DISTAL PHALANX

Amputations through the distal phalanx pose certain problems because of the nail and nail bed. Injuries of the fingernail are often treated either by gross neglect or by removal of the nail as though it were a detriment to wound healing. Quite the contrary, preservation of the nail has proved to be extremely valuable. With fractures of the distal phalanx, replacement of a partially avulsed nail usually will reduce and hold the fractured fragments far better than any externally applied splint. Simple suture of a lacerated nail frequently will prevent post traumatic nail deformities (figure 2).

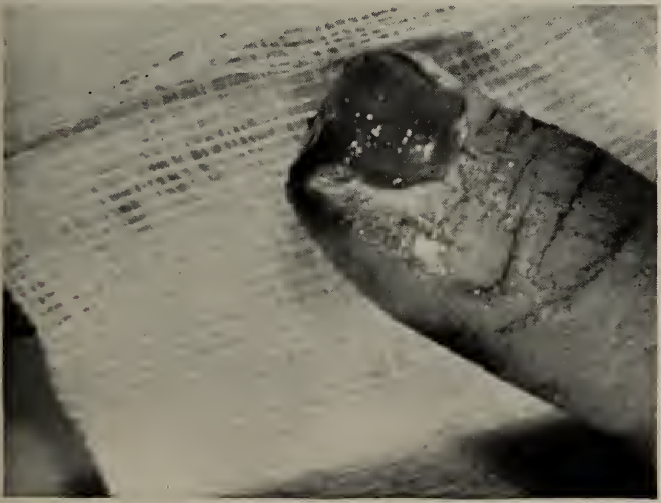

Fig. 3. Photograph showing a traumatic amputation of the tip of a finger accompanied by avulsion of the nail.

If one elects to repair an amputation stump by simple closure utilizing local skin flaps and the remaining nail is to be sacrificed, then the matrix of the nail must be dissected well back to prevent regrowth of nail fragments which can be annoying. If as much as one half of the nail bed is present, it should be saved. If the nail is still present, then it is relatively simple to close the amputation stump with a split thickness graft which dorsally is sutured directly to the fingernail. If the nail has been avulsed and cannot be salvaged for reapplication, then the reconstruction is not so simple (figure 3). It is untenable to suture the graft to the soft nail bed because the latter will be pulled down resulting in an ugly clawlike nail. An artificial plastic nail sutured onto the nail bed acts as an efficient scaffold to allow anchoring of either a palmar flap or free skin graft (figure 4). This technic is similar to that described by Swanker[9] for grafting nails.

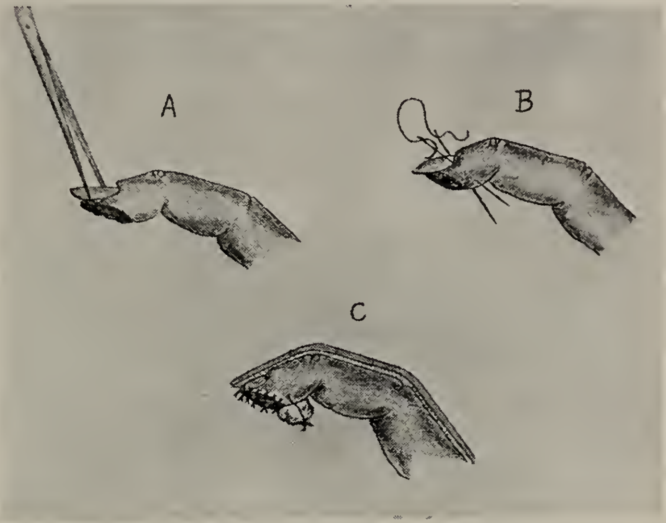

Fig. 4. Drawing showing technic of repairing a finger tip amputation in which the nail had been avulsed such as was illustrated in fig. 3. A. Plastic nail trimmed to conform to patient's nail bed and inserted beneath nail fold. B. Held in position by suture extending through thickness of finger. C. Suture tied over a gauze roll. Either split thickness graft or local flap may be sutured to plastic nail. Sponge pressure is applied over plastic nail to keep granulations down. The plastic nail is removed in two to three weeks.

COMPLICATIONS

Infection.—In spite of the addition of many new antibiotics to medical armamentarium, the incidence of infection in finger injuries still remains quite high. From compilations of the National Safety Council[1] it is learned that of all injuries, one in ten becomes infected, but of all hand injuries, one in four becomes infected. The fact that most of these injuries are sustained in industrial workers whose hands may be grossly contaminated by grease and grime at the time of the accident is little excuse but is rather a challenge to be more meticulous in surgical care. One must not be lulled into a feeling of false security by the flamboyant claims of the newest "miracle drug." The prevention of infection has already been discussed. In wounds older than six to eight hours or those in which there has been considerable crushing of tissues, it is preferable to leave them open following debridement and close them secondarily in several days when it is evident that the wound is clean. Those wounds with obvious infection are treated by the orthodox methods of adequate drainage, warm moist dressings and antibiotics.

Ankylosis.—The most skillful surgical repair of a finger injury is worthless if a stiff finger results. Unfortunately the interphalangeal joints stiffen more readily than any other joint in the body. This complication need not occur if the following are observed:

1. Avoid infection,
2. Handle tissues gently with fine instruments and sharp dissection.
3. Following surgery, maintain adequate pressure and keep the extremity elevated. (These last two points are so important that the task should not be assigned to some junior assistant.)
4. The injured part should be immobilized by a splint, but splinting for too long a time should be avoided. The uninvolved parts should not be incorporated in the dressing.

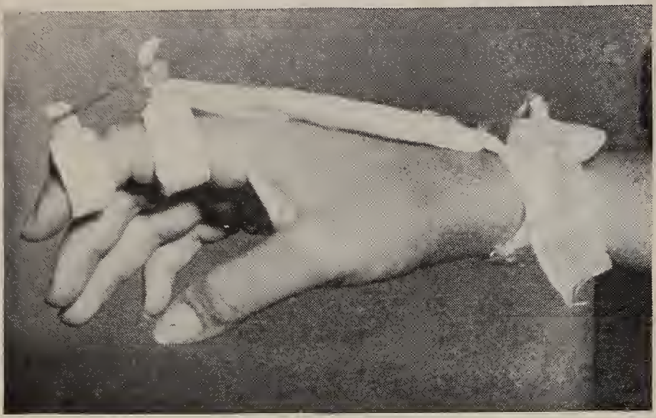

Fig. 5. Photograph showing application of extension splint to correct a flexion contracture at the proximal interphalangeal joint. Bandage is tied around wrist to keep the proximal band from slipping forward. The splint is made from ¼ inch aluminum strips over felt pads.

Keeping a fractured phalanx splinted until there is x-ray evidence of bony union will lead to ankylosis for there is usually little x-ray evidence of healing before four to six weeks. Therefore, the treatment should be designed to allow some finger motion between the second and third weeks. It is safer to err on the shorter than the longer side. Physiotherapy should be started as soon as the acute reaction to trauma has subsided. This includes active and passive exercise, hydrotherapy, paraffin soaks and massage. If one is not equipped to direct such treatment, then the patient should be turned over to a good physiotherapist. Dynamic splinting has proved to be one of the most valuable adjuncts. These splints usually must be improvised to suit the particular situation at hand. With a tin-snips, some aluminum strips, glue, felt and the other more conventional equipment in a surgeon's office, one can cope with almost any problem. Figure 5 illustrates a simple but efficient device for obtaining extension, or it may be reversed if one wishes to flex a finger. The patient usually wears this at night and during the day uses those physiotherapeutic measures mentioned previously.

Capsulotomies occasionally must be resorted to for mobilization of an ankylosed joint and some men have reported fair results from arthroplasties although I have had no experience with them.

FRACTURES

It is not unusual for fractures of the phalanges and metacarpals to accompany these injuries. Most of these fractures can be treated by simple splinting. Multiple fractures are immobilized on a universal type splint designed by Allen and Mason.[10] Occasionally it is expedient to pin unstable fractures although this method is not frequently used.

CRUSHING INJURIES

Crushing injuries (figures 6, 7 and 8) demand a maximal degree of surgical judgment as they so frequently cause considerable disability. Immediate excision of all nonviable tissue and application of a viable covering is a well intended dictum, but this is an over-simplification. It is usually extremely difficult to predict the viability of crushed tissue. Even when the surface shows evidence of frank necrosis, one cannot tell accurately to what depth this process extends. If there are no important underlying structures, these injuries may be treated conservatively until a definite line of demarcation has been established. However, if important structures are involved, such as tendons or joint capsules, then one cannot afford to wait too long. Tissue of questionable viability should be excised early and the defect covered by an appropriate skin graft, pedicle or flap grafts if tendon or bone are exposed and split thickness grafts if these structures are adequately covered.

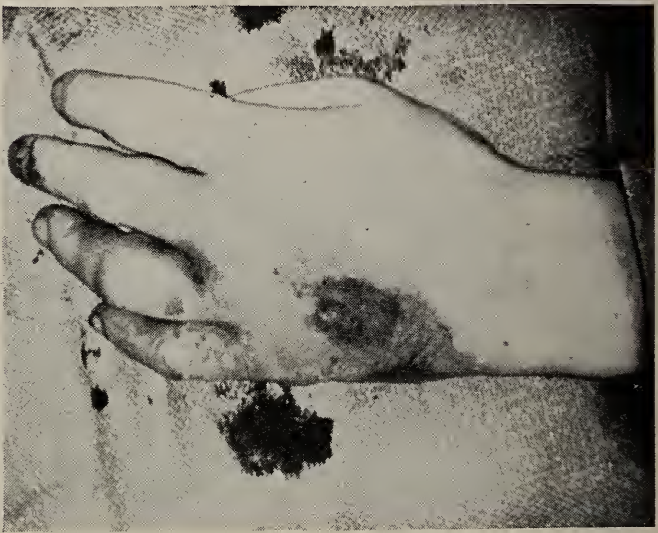

Fig. 6. Photograph of a hand two hours after a conveyor belt injury. Dark area appeared to be necrotic. With extensor tendon just beneath area of necrosis early excision and skin grafting is advocated, rather than watchful waiting.

SUMMARY

The treatment of finger amputations and complications of these injuries are discussed in the following categories:

1. The general principles of treatment are based on an individual modus operandi.

2. The pros and cons of three methods of repair are discussed: (a) simple closure of the stump by local revision of tissue, (b) full thickness and split thickness grafts, and (c) pedicle flaps.

It has been emphasized that it is important to fit the type of repair to the patient rather than to dogmatically adhere to a single method.

3. Amputations through the distal phalanx present problems peculiar to the anatomy of this region. An original method of repairing finger tip injuries has been described in which the fingernail has been avulsed.

4. Complications of these injuries have been discussed in the following order: (a) infection, (b) in ankylosis, the value of dynamic splinting is mentioned and an original type of extension splint has been described, (c) fractures, and (d) in crushing injuries, in dealing with tissue of questionable viability, differentiation has been made between necrosis overlying important structures and necrosis which does not involve important structures. The former is treated by early excision and skin grafting, whereas the latter may be treated conservatively until there is no longer any question as to the viability of the tissue.

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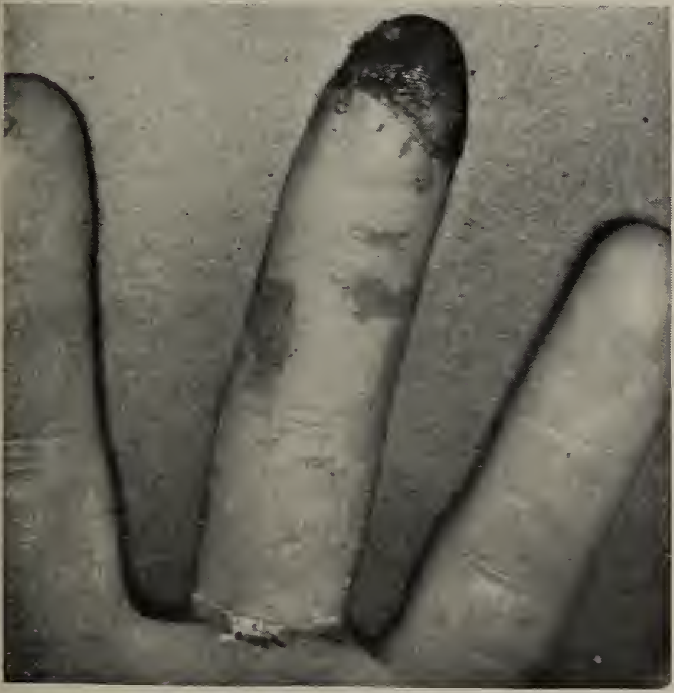

Fig. 7. Photograph showing gangrene following suture of laceration of finger tip. Demarcation was not definite until ten days following injury. Treated by local excision of necrotic tissue and application of split thickness skin graft and 100 per cent take.

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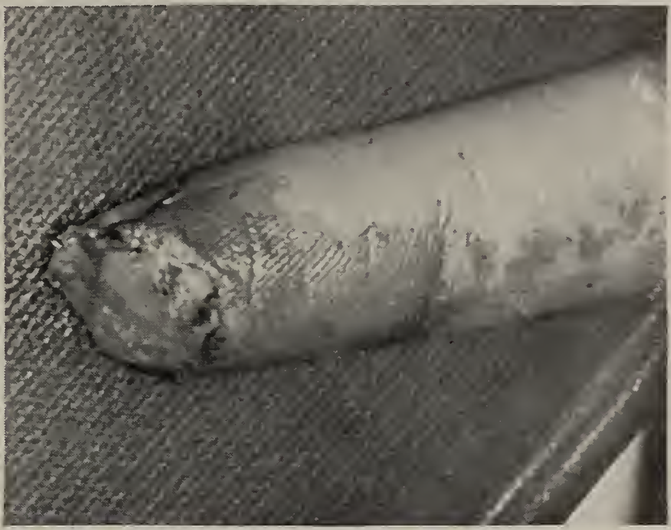

Fig. 8. Photograph showing repair of fingertip with split thickness graft three weeks after surgery. (Same Case as fig. 7).

Don't Just Stand There . . .

. . . and most important is that each member can express himself directly by writing to the state representatives in the A. M. A. House of Delegates and to the members of the Board of Trustees. These folks are our representatives and the only way they can find out what we are thinking is to hear about it. They are not mind-readers nor are they endowed with extrasensory perception.

If the A. M. A. is acting contrary to one's individual opinion in some matter, do something about it. "It's Your A. M. A."—G. Wilse Robinson, Jr., M.D., Editorial, *Jackson County Medical Bulletin.*

. . . And on the Other Hand . . .

We are a little confused and considerably dismayed by President Eisenhower's proposal to ease the government's toe into the door of the health insurance field. . . . This is either a political hoax, a sop to the socialized-medicine claque, or a most naive conception of the reinsurance business. . . . We regret that the President seems to have discarded the rational suggestion for alleviating the burdens of illness advanced last session by Rep. Oliver Bolton . . . to make all medical expenses deductible from income for tax purposes. Thereby the ones who suffered most would obtain the greatest benefit.—Editorial, *Chicago Daily News.*

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Use in the Treatment of Urinary Tract Infections

MORRIS ABRAMS, M.D., AND BEAUMANOIR PROPHETE, M.D., *St. Louis*

FURADANTIN IS a new antimicrobial chemical agent* recently shown to be effective in the treatment of a wide variety of urinary tract infections.[1, 2] The purpose of this paper is to report results with Furadantin in the treatment of twenty-one patients with miscellaneous urinary tract infections. Seventeen patients were on the ward service of Homer G. Phillips Hospital; three patients (cases 9, 10 and 19) were private patients (M. A.), and case 21 was an out-patient from the clinic of Barnes Hospital. These last four patients were treated as ambulatory cases.

The pharmacology of Furadantin has been investigated adequately and published elsewhere.[1, 2] These important studies showed that 45 per cent of the drug administered orally was excreted in the urine; that crystalluria was not to be feared as a complication. Toxicity studies with animals indicated a wide margin of safety. Microorganisms, *in vitro,* did not appear to develop resistance to Furadantin. There were no significant changes in the red and white blood cells after prolonged administration of the drug. From a clinical point of view these same investigators were impressed with the paucity of side effects. Nausea and vomiting alone were reported as occurring in a small percentage of the patients taking Furadantin. For these reasons it was decided to use Furadantin orally in the treatment of a small group of refractory urinary tract infections.

Before starting Furadantin a blood nonprotein nitrogen determination, complete blood counts, microscopic urinalysis and urine cultures were done on all ward patients in the hospital. This was repeated on the fifth and thirteenth day of therapy. The patients were examined daily by one of us (B.P.). At no time were there any significant changes noted in the blood picture or nonprotein nitrogen. Urine cultures alone were done on the private patients at the beginning and at the end of fourteen days of treatment. Complete urinalyses, however, were done weekly. Furadantin was given orally in four divided doses immediately after meals and at bed time. The dosage varied from 5 to 7 mg. per kg. of body weight. The larger dosage was given to those patients who were on catheter drainage or who had a complication such as a perineal fistula. No patient received the medication for more than fourteen days. The only side effect noted was nausea in five of the patients. In only one case (11) was nausea and vomiting marked. This was greatly minimized by reducing the dose of Furadantin. None of the patients complained of diarrhea, abdominal pain, proctitis or pruritus.

The results of this study were encouraging and are summarized in table 1. Twenty of the twenty-one patients admitted moderate to marked clinical improvement of urinary symptoms within two to three days after starting Furadantin. The only true clinical failure was case 18. This patient complained of frequency of urination during the day and night with urgency and terminal dysuria of three years duration. She had been treated with weekly dilatations and bladder instillations for many months as an out-patient. Because her symptoms persisted she was admitted to the hospital for additional study. The excretory urogram revealed a normal upper urinary tract. Repeated cystoscopic examinations demonstrated only a moderate trigonitis and urethritis. The remainder of the bladder was normal. The urine culture grew E. coli and Pseudomonas aeruginosa. At the end of the fifth day of Furadantin treatment the E. coli was eliminated. The Pseudomonas aeruginosa persisted at the end of thirteen days of Furadantin treatment. It is of some significance that this patient likewise failed to have any clinical improvement of her urinary frequency after a trial period of banthine and cortisone medication.

Bacteriologically, there were twelve cures and seven failures. The remaining two cases were clinically much improved but unfortunately no urine cultures were taken. A summary of these two cases follows: Case 17 discharged himself from the hospital at the end of the fifth day of treatment because he was feeling so much better that he did not think any more treatment was necessary. His urine on discharge was microscopically negative. No organisms could be identified with the Gram stain. It seems justifiable to list this patient as a probable cure. The other case (21) was a patient from the out-patient urological clinic of Barnes Hospital. This man had a Millin type sling operation for incontinence which followed a transurethral resection of the prostate gland. This procedure corrected the urinary incontinence. Later, the patient was operated on for a vesical calculus which developed around a ruptured Foley bag. Following this operation the patient continued to have a persistent pyuria which failed to respond to all the known chemotherapeutic and antibiotic agents now available. Before starting Furadantin his urine was grossly cloudy and contained numerous white blood cells and gram-negative bacilli. One week later the patient reported to the clinic much im-

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* Supplied by Eaton Laboratories, Inc.

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TABLE 1

SUMMARY OF CLINICAL AND BACTERIOLOGICAL RESULTS WITH FURADANTIN

Case	*Initials, Age, Sex*	*Diagnosis*	*Causative Organism*	*Clinical Result*	*Bacteriological Result*	*Comment*
1	P.G., 61 F	Cystitis, cancer of bladder	Proteus	Improved	Failure	Patient discharged herself at end of fifth day of treatment. Urine grossly clear at time of discharge.
2	G.C., 63 M	Cystitis, postoperative suprapubic prostatectomy	E. coli	Excellent	Negative culture	Urine cleared grossly at end of third day. Culture negative on fifth and thirteenth day.
3	R.T., 30 F	Bilateral pyelonephritis, uretero-cutaneous anastomosis for cancer of bladder	E. coli	Improved	Negative for E. coli, positive for Ps. aeruginosa	Moderate nausea throughout medication.
4	T.C., 59 M	Prostatitis, cystitis, bilateral pyelonephritis	E. coli	Excellent	Negative culture	Mild nausea.
5	H.M., 39 M	Prostatitis, chronic cystitis	E. coli	Excellent	Negative culture	Patient had been followed in O.P.D. for three years. Urine grossly cloudy. Penicillin, streptomycin, sulfadiazine, aureomycin, terramycin tried previously without success.
6	L.R., 45 F	Chronic cystitis, trigonitis	E. coli	Excellent	Negative culture	No side reactions. Culture negative at end of fifth day of treatment.
7	E.T., 50 F	Calculus in kidney pelvis	E. coli, Ps. aeruginosa	Improved	Negative for E. coli, positive for Ps. aeruginosa	Furadantin started two days pre. op. and continued for twelve days post-op. Urine grossly clear on discharge from hospital, but positive for Ps. aeruginosa.
8	W.F., 49 M	Prostatitis, cystitis	Proteus	Excellent	Negative at fifth day of treatment	Patient returned to O.P.D. one month later with recurrence of symptoms.
9	R.S., 35 F	Chronic cystitis, urethritis	A. Aerogenes	Excellent	Negative culture	Private patient treated during past year with all known antibiotics without ever clearing urine or symptoms.
10	R.D., 27 F	Chronic cystitis, urethritis	Proteus,	Excellent	Negative culture	Private patient resistant to all antibiotics.
11	S.L., 45 M	Cystitis, multiple perineal fistulae	E. coli	Improved	Negative for E. coli, positive for Ps. aeruginosa	Patient had indwelling catheter during treatment. Local improvement of draining perineal sinuses definite. Marked nausea and vomiting during treatment. Diminished with reduction of dose.
12	M.C., 63 M	Chronic cystitis, prostatic hypertrophy	Ps. aeruginosa	Improved	Failure	Poor operative risk. On catheter drainage for large prostate. Urine grossly cloudy before Furadantin. Urine cleared grossly during treatment.
13	H.J., 61 M	Cystitis, multiple perineal fistulae, suprapubic cellulitis	E. coli, Proteus	Excellent	Negative culture on thirteenth day of treatment	No catheter. Local improvement of draining sinuses definite.
14	M.C., 26 F	Cystitis, vesicovaginal fistula	Proteus E. coli,	Improved	Negative for Proteus and E. coli, positive for Ps. aeruginosa	Furadantin started fifth postoperative day. Suprapubic and urethral catheters during course of therapy.
15	M.G., 60 M	Chronic cystitis, postoperative T.U.R.	E. coli	Excellent	Negative culture	Urine grossly cloudy. Patient treated in O.P.D. for many months without success. Mild nausea.
16	M.D., 61 F	Cystitis, pyelonephritis	E. coli	Excellent	Negative culture	Mild nausea and vomiting throughout course of treatment. Urine grossly cloudy prior to treatment.
17	N.N., 65 M	Acute cystitis, prostatitis	E. coli	Improved	No culture. Microscopic urine free of pus at fifth day	Patient improved then signed out of hospital at end of fifth day.
18	O.R., 66 F	Chronic cystitis, urethritis	E. coli, Ps. aeruginosa	No improvement	Negative for E. coli, positive for Ps. aeruginosa	On Furadantin fourteen days. No change in urinary symptoms.
19	A.S., 64 F	Chronic cystitis, urethritis	Proteus	Excellent	Negative culture	Private patient. Grossly cloudy urine. Failed to respond to sulfadiazine and aueromycin.
20	A.G., 65 M	Cystitis, postoperative T.U.R.	Proteus	Excellent	Negative culture	Treated in O.P.D. for many months with antibiotics without success. On fifth day urine grossly clear. Nausea moderate.
21	A.S., 72 M	Chronic cystitis	No culture taken. Urine grossly cloudy, numerous gram-neg. bacilli	Excellent	Microscopically negative at end of seventh day	O.P.D. patient, Barnes Hospital. Treated with all antibiotics without success.

proved. His urine was then grossly clear and only an occasional white blood cell was noted per high power field. All his irritative bladder symptoms disappeared for the first time since the vesical lithotomy.

The bacteriological failures are of great interest. In case 1 the causative organism was B. proteus. Although the patient was improved clinically she received Furadantin for only five days and then discharged herself from the hospital. At the end of this time B. proteus was still present. The remaining six failures were all due to Pseudomonas aeruginosa. In this study Furadantin was ineffective in eradicating this organism. It is of some importance to note that three of these six patients had indwelling catheters during Furadantin treatment. The difficulties of eradicating infection in the presence of catheters is well known. Many observers have reported the development of Proteus or Pseudomonas organisms during therapy with the newer multiple spectra antimicrobial agents.[3] Although Furadantin proved capable of eliminating B. proteus it failed to eliminate or to prevent the development of the Pseudomonas organisms in this study. In our next group of patients that we will study we plan to increase the dose of Furadantin to the limit of tolerance in those patients having Pseudomonas aeruginosa infection. Combinations of Furadantin with penicillin or streptomycin have been shown to have definite synergistic effects in vitro.[1] This will also be tried in the presence of Pseudomonas aeruginosa. One observation worthy of record is the local improvement noted in the presence of draining multiple perineal fistulae with Furadantin (cases 11 and 13).

In this preliminary report no adequate long range follow up study was attempted. It is planned to reexamine as many of these twenty-one patients as is possible to determine how many have remained clinically improved and bacteriologically negative. This will be reported later.

SUMMARY

Furadantin was given orally to twenty-one patients with urinary tract infections. Twenty of this group admitted clinical improvement of urinary symptoms within two to three days after starting treatment.

There were twelve bacteriologic cures and seven failures. The remaining two cases showed a microscopic clearing of the urine but no cultures were taken.

Six of the seven failures were due to Pseudomonas aeruginosa.

The only side effects noted were mild nausea and vomiting which occured in five of the twenty-one patients.

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Others Say

"Be Not the First . . ."

A perusal of current medical literature reveals more than the usual number of reports dealing with serious or fatal reactions to therapeutic agents. Drugs, like fire and deadly weapons must be regarded with respect and used with due caution. Good medical practice requires a constant weighing of expected benefits against possible toxic effects in the prescribing of any drug. In such manner the practitioner steers a course between the extremes of therapeutic nihilism and prescription enthusiasm. The use of a potentially dangerous compound in the face of serious illness may be amply justified, while use of the same agent in a self-limited or mild condition constitutes folly and is as unnecessary as the use of a cannon to kill a mouse.—C. F. Wilson, M.D., "The President Says," *Cape Girardeau Medical Journal.*

Who's in the Wrong Pew?

With all the recent publicity that has appeared in several of our national periodicals concerning the transgressions and scruples of physicians . . . it was a pleasurable surprise to find the following in the church bulletin:

"Give Place to the Physician"

There is no question of the high regard in which the American public holds the medical professions. In the space of a single generation, we have seen many of the dreaded enemies to our health checked, if not almost entirely conquered. We have learned to look and listen hopefully for news bulletins of further conquests, and we respect the army of researchers, physicians, nurses, and dentists as the conquering heroes of the day. —"Pro and Con," *Pettis County Medical Society Bulletin.*

Oral Electrolyte Therapy

Clinical Use and Its Importance in the Early Stages of Diarrhea in Infants and Children

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DURING THE LAST decade numerous investigators have verified the importance of fluid and electrolyte replacement in the treatment of diarrhea in infants and children.[1, 2, 3, 4, 5] Hill has shown that there is a relatively greater daily obligatory water exchange in infants and children than in adults and the younger the patient the more important this fact is. It is obvious then that the child is more likely to experience fluid deficits than the adult, and that this disturbance will appear more quickly.[6] Merrill calls attention to the importance of realizing that dehydration usually means loss of both water and salts.[7]

It has frequently occurred to us that if dehydration and acidosis are the most dreaded complications of diarrhea[8] and if they can be overcome successfully by fluid and electrolyte imbalance correction in the severe cases that reach the stage of hospitalization, how important it is that this treatment be instituted diligently in the early stages at the first sign of diarrhea. Every child that succumbs from diarrhea, and every severe case in which heroic measures must be instituted, was once a mild case. It should not be necessary to wait for the development of the condition until either a definite pathogen can be isolated or the condition be diagnosed as nonspecific before using a corrective treatment that all agree is most likely to be successful. In the early stages, oral therapy is desirable. From a practical standpoint the early administration of oral electrolytes eliminates the necessity for prolonged parenteral therapy; is less disturbing to the patient, is less time consuming and less difficult technically. In addition the oral route is safer for the administration of potassium.[7] In pediatric practice, emphasis is constantly shifting from the treatment of sickness to preventive medicine.

Hansen states that in Texas there is no need for the high death rate in infants and children from diarrhea and that the physician plays the important role in whether or not the patient succumbs. That of course is only true in those cases that come to the attention of the physician early enough. He further states that maintenance of fluid and electrolyte balance in the early stages of diarrhea may go far in preventing development of severe dehydration and acidosis and resulting death in infants and children in Texas.[9] If that is true in Texas, there is no reason why it should not be true elsewhere. We have previously shown in a preliminary report[10] that the use of an oral electrolyte solution with a nonabsorbable sulfonamide is effective in controlling mild diarrheas quickly. We now wish to report on our continuing clinical experience.

CLINICAL STUDIES

The present report includes 166 cases of diarrhea, diagnosed clinically as mild to severe. They were approximately equally divided into male and female. The ages ranged from 3 hours to 8½ years. Weights ranged from 6 pounds to 54 pounds, average weight 18 pounds.

Gastrointestinal symptoms included various degrees of diarrhea, nausea, vomiting, distention, loose, mushy to watery stools, from five to fifteen a day, with mucus and blood. In addition, high temperatures and anorexia were common. Dehydration was classed as slight in 41 per cent of the cases (tongue slightly dry, poor fluid intake, fontanel questionably sunken), moderate in 22 per cent of the cases (skin symptoms in addition to the above) and severe in 15 per cent of the cases (full blown picture). Carbon dioxide combining power was checked on selected cases, mostly severe, and ranged from a low of 15 volumes per cent to 48 volumes per cent. In ninety-one of these cases the regimen of treatment included replacement of electrolytes by infusion with physiologic saline, 1/6 molar sodium lactate, antibiotics and absorbable sulfonamides to combat infections, transfusions of plasma and blood when indicated, and diet.

In the next seventy-five cases we adopted a regimen of treatment which placed greater emphasis on the oral replacement of electrolytes. In addition to the correction of the electrolyte disturbance it seemed appropriate to treat infant diarrhea in the intestinal tract as well. With the availability of the newer nonabsorbable sulfonamides we deemed it advisable to use one of these prophylactically. For our purpose we selected a sulfonamide that has been shown to be clinically safe, nontoxic, sterilizes the intestinal contents, diffuses into all layers of the intestinal wall and is not detectable in the blood stream following oral administratoin.[11, 12, 13, 14] We selected Phthalyl-Sulfacetamide. Treatment consisted of the oral administration of a solution containing 10 grams of sodium and potassium lactates in each 100 cc. (representing 0.8 gram of elemental sodium and 2.5 grams elemental potassium), 4 grams of

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Phthalyl-Sulfacetamide, 4 grams of Sodium-Carboxyl-Methyl-Cellulose (CMC) and 5 per cent Glucose (Kalacet). This solution was administered in a dosage of 5 cc. per kilogram of body weight in twenty-four hours in divided doses in water in most cases and as high as double that amount in a few of the more severe cases. Our first experiences with this treatment indicated a shortening of the duration of the symptoms and, since data for comparison was available from the previous series, we did not deem it justifiable to withhold it from any of these patients for control purposes. Supportive measures were used when there were complications and wherever deemed advisable in the more severe cases.

Complications consisted of acute pharyngitis in three cases, broncho-pneumonia in three cases, lobar pneumonia in one case, otitis media in one case and rhinitis in one case. Supportive measures consisted of antibiotics, absorbable sulfonamides, 1/6 molar sodium lactate, parenteral fluids, glucose, saline and diet.

RESULTS

In our first series we found our methods successful in controlling the diarrhea in from forty-eight hours to seven days. In our second series we found the oral solution acceptable to all ages. No vomiting of the drug occurred. No difficulty was encountered with the oral administration since even the severely ill tolerated it. Temperatures fell promptly, the character of the stools improved usually within twenty-four hours, the duration of the illness was effectively shortened and the amount of intravenous therapy was definitely decreased.

We had two deaths. One was a 9 months old 18 pound male with a history of diarrhea of twenty days duration when medical attention was first sought. The patient presented a moribund picture with severe dehydration and acidosis. CO_2 measured 15 volumes per cent. Five days of intensive treatment proved of no avail. This case again only emphasizes the necessity for early treatment where possible. Our second death was a 6 pound 7 ounce male newborn. Diarrhea developed when 2 days old. Four days of intensive treatment failed. We were unable to obtain permission for an autopsy.

CONCLUSIONS

The clinical use of an oral electrolyte replacement solution is:

1. Acceptable to and tolerated by the patient;
2. Practical to use and eliminates the necessity for prolonged parenteral therapy; is less disturbing to the patient; is less time consuming, and is less difficult technically.
3. Is effective in 89 per cent of the cases.
4. Is necessary if mortality from diarrhea is to be held to a minimum.

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Others Say

Formula for Success

. . . I believe that a University Medical Center should be a part of its community and not isolated in an ivory tower. The street between the center and the community should be heavily traveled in both directions . . . the Board of Trustees have charged me to . . . "stimulate broad interests in health and hygiene to the end that the greatest good shall result to the people of Pittsburgh and Western Pennsylvania and at the same time be of benefit to the country at large and mankind in general."

. . . At the moment I can only bespeak your tolerance of a newcomer and your support for the objective of the best health care and the best medical education possible.—Robert A. Moore, M.D. (ex-Dean, Washington U.), Speech to the medical faculty, University of Pittsburgh.

Fresh Start to an Old Problem

The basic purpose of the administration's health program just submitted to Congress is to deal effectively with the nation's problem without incurring the hazards of federal compulsion or what is known as socialized medicine.

. . . Now it's up to Congress to study and to act on the program. Bills are already introduced and public hearings are being held. It's a genuine start on a far-reaching problem.—Editorial, *Kansas City Star.*

Postgraduate Review

Male Fertility

Problems as Related to the Practitioner

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PROBLEMS IN MALE fertility are so vast that almost every practitioner is confronted with them in one way or another. More specifically, the general practitioner, gynecologist and urologist are consulted for advice and therapeutic help. Since one out of every seven marriages is a barren one, the problem assumes gigantic proportions.[1] It becomes the physicians' responsibility to sift fact from fiction in this complex problem and scientifically approach these patients with a reassuring attitude. In no field has there been so much sincere investigation and quackery at the same time.

The female species often has been condemned and much studied as the source of infertility. With the introduction of semen analysis, it became apparent that gross defects could be found in the male partner, at least one third of the time. In a situation in which millions of sperm are created for each ovum, there must be many adversaries to insemination. It should be the duty of the practitioner when dealing with fertility problems to eliminate as many of these adversaries as possible. In order to do this, he must have a good understanding of the normal physiologic mechanisms involved.

NORMAL PHYSIOLOGY

The accompanying diagram illustrates the normal pituitary-gonadal relationships. At the age of puberty, under the influence of the hypothalmus, the anterior pituitary begins to secrete gonadotropic hormones in a cyclic fashion. Spermatogenesis probably begins under the influence of a maturation center in the hypothalmus and, interestingly enough, cannot be induced by any known endocrine.[2] The hypothalmus stimulates the basophillic cells of the anterior pituitary to produce the follicle stimulating hormone (FSH).[3] FSH then stimulates spermatogenesis[4] and, with a small amount of ICSH, stimulates the Sertoli cells to produce an "X" hormone sometimes called inhibin.[5] Many authors feel the latter is actually an estrogen.[6] Inhibin returns to the pituitary inhibiting FSH and stimulating ICSH.[7] The "X" hormone may also act to prime the prostate and seminal vesicles. ICSH then stimulates the Leydig cells[8] with the leuteotropic hormone aiding in the release of testosterone. Testosterone then stimulates the prostate and seminal vesicles to produce their secretions normally.

This cyclic response continues throughout life with changes occuring only with senescence. The spermatozoa continue to mature in an orderly fashion, receiving support and nourishment from the Sertoli cells.[9] They are then discharged into the epididymis, a structure two inches long containing one continuous coiled tubule twenty feet long. The sperm are transmitted by muscular peristalsis and the action of cilia. At this level their motility is poor and these sperm are actually inadequate for fertilization. It has been estimated that it takes from ten days to two weeks for the spermatazoa to traverse the epididymis. During this period, there is considerable physical change and maturation of the sperm. The seminal vesicles, stimulated by testosterone, produce fructose.

This unique sugar added to the seminal plasma is utilized readily by the spermatazoa for motility and energy, but is utilized by mature spermatazoa only.[10] Contrary to previous belief, the seminal vesicles do not act as a storehouse for spermatazoa.[11] The ductus deferens probably stores spermatazoa more than the seminal vesicles. The prostate adds other unusual and unique chemicals to the ejaculate. Citric acid, acid phosphatase and other proteins and enzymes are added for the benefit of the spermatazoa.[12]

Normal semen coagulates after ejaculation and this forms a plug at the cervical os around the cervical mucus. The plug is lysed in from ten to fifteen minutes by hyaluronidase liberated from spermatazoa. The mucous operculum and seminal pool remain as a separate colloidal system with an alkaline pH. Normally there is no contact of the sensitive spermatazoa and the acid vagina. The cervical mucus is also selective and allows the penetration of normal spermatazoa only.[13] After penetrating the cervical mucus, the spermatazoa propel themselves through the uterus into the Fallopian tubes where fertilization can take place.

The patient is evaluated with these facts in mind. When the couple has made an earnest effort to have children for more than a year and have been unsuccessful, investigation is indicated. It is first necessary to make a thorough examination of the patient and then attempt to establish a more ideal environment for fertilization. In this paper, we shall attempt to enumerate some of the more common deviants and their methods of correction.

The history should include the frequency of intercourse, the use and types of contraception. Farris has shown that it takes about five days for the male to regain a maximum sperm count following intercourse.[14] He feels that too frequent intercourse may actually cause the male to be subfertile. A history of an abnormal growth and development may suggest endocrine problems. Infections, both systemic and urologic, are important. Hepatitis, by creating liver damage, may establish improper metabolism of steroids and upset the normal pituitary gonadal relationship. High prolonged fevers have been incriminated in creating seminiferous tubular atrophy. Certainly orchitis and prostatis are an important factor in fertility. A history of physical exhaustion or improper diet may be a factor in subfertile males.

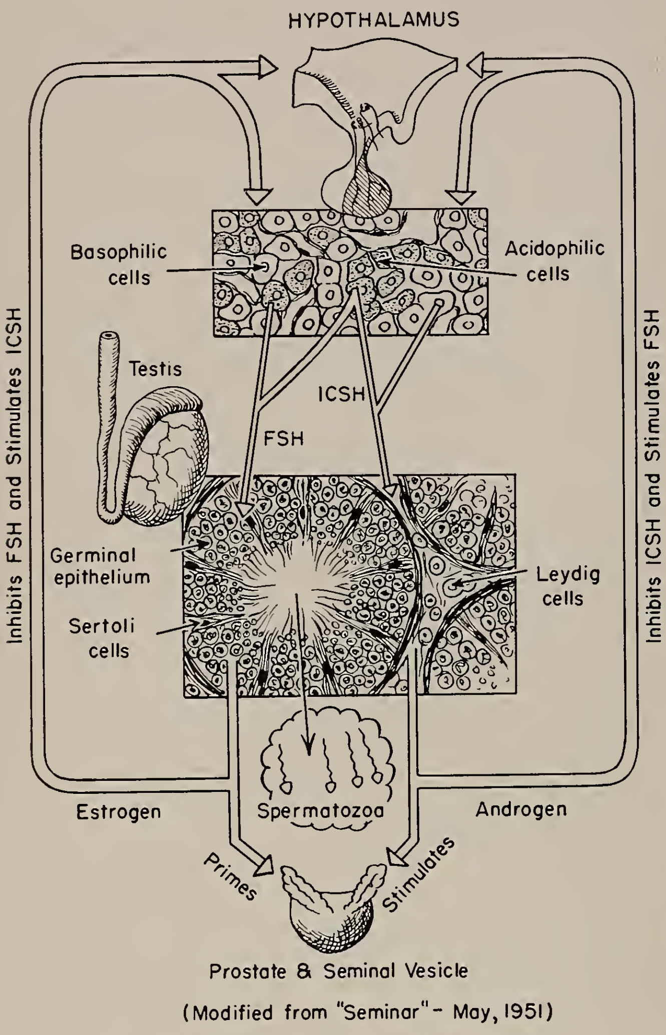

Fig. 1. Prostate and seminal vesicle. (Modified from "Seminar," May, 1951.)

Complete physical examination with emphasis on external genitalia should be performed. Normal testes associated with an azospermia indicate an obstruction of the vas. Testicular biopsy will usually show adequate spermatogenesis in these cases. Undescended testes have to be brought down before puberty or permanent atrophy will result from the body heat. We also feel that it is wise to calibrate the urethra with a number 16 soft rubber catheter to rule out a stricture.

Urinalysis may reveal urinary tract infection or diabetes, both contributing to infertility. Thyroid secretions act as a metabolic catylist and in the presence of hypothyroidism all endocrine glands function poorly. Any patient with a basal metabolic rate or less than –5 should be on thyroid medication in conjunction with any other indicated therapy.

The semen analysis is an integral part of the examination. There has been a great deal written concerning the refinement of technics; however, we feel there are five things which are important: volume, count, motility, per cent abnormal forms and viscosity. The normal volume ranges between 4 and 6 cc., and a volume of less than this may indicate inadequate secretions from prostate and seminal vesicles or insufficient period of continence prior to collecting the specimen. It has often been said that a minimum count of 60 million per cc. is necessary for conception. McCleod, however, in a study of 1,000 known fertile males, found 5 per cent had counts below 20 million per cc.[15] In animal work, semen is frequently diluted as much as one hundred times and still retains its potency. for artificial insemination. It would seem, therefore, that fertility would depend more on motility and normalcy than on count per cc. We feel that normal sperm should maintain motility for at least eight hours at room temperature and that a normal count should have less than 10 per cent abnormal forms. Sandler proposes an excellent method of assaying the male fertility index:

Count per cc. × Volume × per cent motility × per cent abnormal forms equal the total number of normal motile sperm.[16]

The best method of estimating normal available sperm is by the Huhner test. This test, when done correctly, will give a good impression of the number of normal motile sperm that reach the cervical os. An estimate of from 15 to 30 normal sperm per high power field has been suggested as normal, but is probably too high.[17]

We have been performing the chemical analysis of fructose and citric acid in the seminal plasma. Fructose has its origin in the seminal vesicles and citric acid in the prostate.[18] Both of these substances depend directly on testosterone activity. Their level, therefore, is a good indication of Leydig cell activity. They also show, grossly, how the accessory sexual glands are functioning in their important function of furnishing nutrition for the spermatazoa. By doing fractional determination of fructose at one half hour intervals, one is able to evaluate the metabolic activity of the sperm.

Modern advances in endocrinology have allowed not only more specific diagnoses but have also given some rational as to the use of the various endocrines. In the past, the male and female hormones have frequently been injudiciously used and caused more harm than benefit.

The estimation of the 17 Ketosteroid titer in the urine gives a gross idea of testicular and adrenal androgens. The normal in the male is about 10 to

18 mg. in twenty-four hours. Since these products are the breakdown products of androgens, they give an indirect measurement of androgenic activity. Robinson and Goulden have broken them down into eight fractions and it may be in the future we will be able to find endocrine deviates by studying such fractions.[19]

The FSH titer in the twenty-four hour urine really gives a better idea of the pituitary gonadal relationships. In the male most of the gonadotropins in the urine are in the form of FSH. FSH stimulates spermatogenesis. With a low FSH, there is a failure of maturation of spermatazoa. This test requires adequate laboratory facilities, however.

The following conditions are associated with low FSH: Idiopathic eunichoidism with low FSH; secondary to organic lesions in or near the pituitary; secondary to estrogen therapy. Because hypospermatogenesis and arrest of maturation of the sperm is seen with normal FSH, it is obvious that other factors play a part. LH stimulation is probably also necessary for full maturation. When FSH is high, it usually means failure of the seminiferous tubules with no inhibition of FSH. This condition occurs in Klinefelters syndrome in which there are normal Leydig cells with tubular sclerosis. High FSH is also found after orchotomy and possibly with so-called male climacteric.

The therapy of male infertility is limited. Careful elimination of gross deviations and careful attention to detail are important. Any anatomic or congenital defect should be corrected. Undescended testes should be brought down before puberty so that permanent testicular damage does not occur.

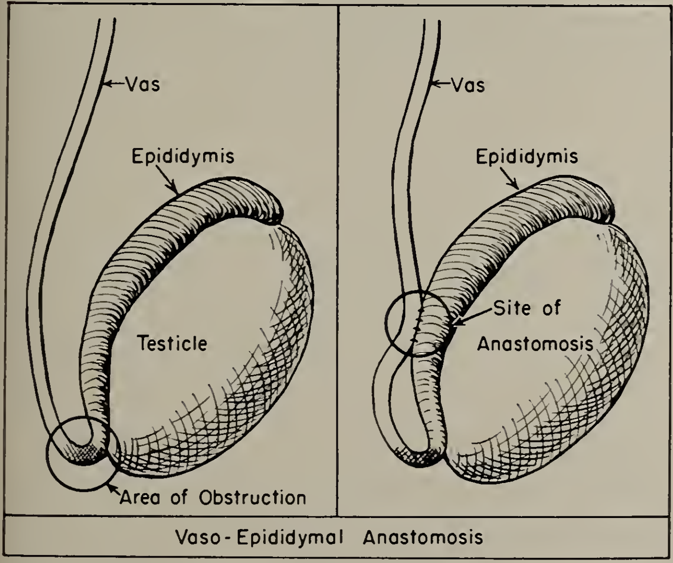

Fig. 2. Vasoepididymal anastomosis.

Where there is a congenital block at the epididymis, if this area can be side-tracked, a vasoepididymostomy should be performed. Obstruction of the vas may be corrected by end-to-end anastomosis over a silver wire. Urethral stricture should be dilated.

Infections should be treated with appropriate antibiotics in both the male and female. Mumps orchitis can be prevented largely by the prophylactic administration of Stilbestrol in patients at or past puberty. If orchitis occurs and the patient develops rapid and progressive swelling, incising the tunica albuginea within the first twenty-four hours may prevent testicular atrophy.

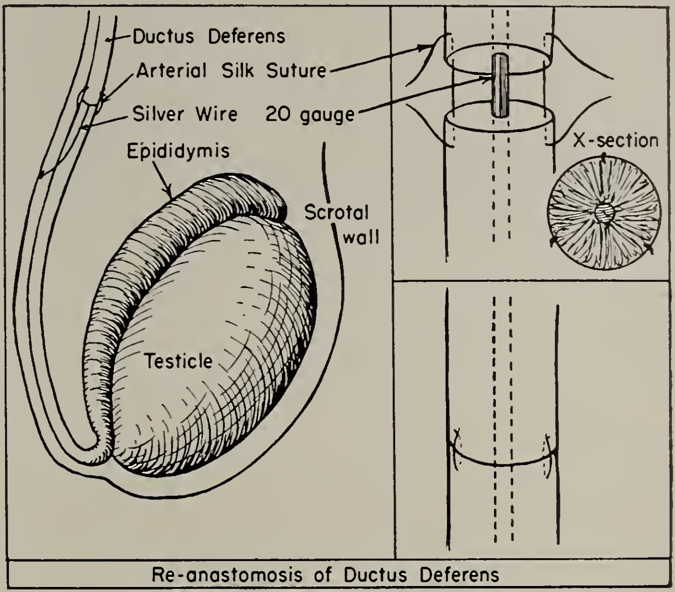

Fig. 3. Reanastomosis of ductus deferens.

There is ample evidence that inanition and fatigue play a strong role in impotency. Supplementary vitamins B and E may have a supporting effect on testicular tubules. Certainly if the patient is over fatigued, he should be advised to obtain more rest. Any exposure to toxic fumes or commercial substances and irradiation should be avoided.

The time of ovulation should be determined if possible. There should be abstinence for five days prior to the date of ovulation so that the male will build up a maximum sperm count and volume. Intercourse should be attempted several times during the ovulatory period to increase the chance of conception. Post-ejaculatory intercourse, by dispersing the semen throughout the acid vagina, probably diminishes the available sperm. Endocrine preparations should be used judiciously. Thyroid should be given to all patients with a basal metabolic rate below –5 and this should be instituted before any other endocrine therapy. Gonadotropins are indicated when urinary FSH is low, indicating pituitary insufficiency. Gonadotropins should not be used in small testes with no evidence of pituitary insufficiency and they should not be used over a long period of time as the body develops antihormones which render the gonadotropins inert. Testosterone has been used in sterility problems in large, small and medium dosage. There is considerable controversy over the use of testosterone in sterility problems. Heckel has recently reported initial depression of spermatazoa with 50 mg. of testosterone three times a week for six to twelve weeks.[20] This therapy when stopped was followed by a rebound increase in the sperm count. Other investigators have not found this constant. Herrold has recently reported that Stilbesterol in small doses may stimulate spermatogenesis.[21] Actually, purified FSH should be the most effective in stimulating spermatogenesis. This may be available in the future. Testosterone and estrogen both probably act on the testes through the anterior pituitary. Large doses of estrogen, of course, completely inhibit spermatogenesis.

The use of endocrines in sterility is still a much disputed subject. We feel sure that not one single substance but a combination of substances are going to be found necessary for the normal development of sperm. The phenomenon undoubtedly is cyclic as illustrated earlier in this paper and is related to hypothalmus, pituitary gonadal function.

The barren marriages suddenly fruitful after adoption, and the effects of psychic and physical trauma on the menstrual cycle in the female serve to point up the importance of psychologic factors in the mechanism of fertility. Electrical stimulation of the hypothalamus will result in ovulation in the rabbit. This area is probably affected in the human by emotions mediated through higher centers.

Therefore, a definite adjunct in therapy is the creation and maintenance of a calm assurance of ultimate success. This confidence is acquired by the patient and maintained when complete efforts at diagnosis and treatment are being made and helpful reassurances are given.

SUMMARY

The known aspects of the physiology of reproduction, especially as regards the male, have been discussed. Diagnosis and classification of types of male sterility, within the limits of present knowledge, are presented. Endocrines, singly or in combination, may represent specific therapy. The creation of harmonious environment may favorably influence hypothalamic function to increase fertility.

710 Professional Bldg.

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Book Review

Diseases of Metabolism—Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan, M.D., Director of Medical Division, Pennsylvania Hospital; Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Pa. With Contributions by Walter Bauer, Hugh R. Butt, Abraham Cantarow, Garfield G. Duncan, Frank Alexander Evans, Ferdinand Fetter, Joseph M. Hayman, Jr., Angel Keys, Friedrich Klemperer, Rachmiel Levine, Edward H. Mason, Max Miller, John P. Peters, J. E. Rall, Rulon W. Rawson, Samuel Soskin, Tom D. Spies, Cecil Watson, Abraham White, Priscilla White. Third Edition, Illustrated. Philadelphia. W. B. Saunders Company. 1952. Price $15.00.

The third edition of this well known publication deals with the metabolism of the carbohydrates, proteins, lipids, vitamins and minerals as well as the metabolic disorders including diabetes mellitus, gout, hypoglycemia, diabetes insipidus, glycogen diseases, obesity, thyroid disorders, renal diseases and porphyrin metabolism. Additional chapters on malnutririon and water balance are included. Each subject is dealt with by a separate author well known in his particular field. Included in the discussions on each disease entity are descriptions of the etiology, symptomatology, pathology, differential diagnosis and treatment. Each chapter is followed by an unusually complete bibliography.

Several of the chapters have been rewritten since the previous edition. The more recent developments in the hormonal and vitamin fields, such as ACTH, NPH insulin, radioactive iodine, vitamin B12 and the citrovorum factor, are mentioned in the revisions. The chapters on diabetes including childhood diabetes and the thyroid disorders are exceptionally well written.

The text is supplemented with numerous charts, photographs, chemical equations and formulas. This book offers an excellent source of information on metabolic subjects which should be invaluable to every medical practitioner regardless of specialty.

J. D. G.

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Case Report

Sclerosing Lipogranuloma of the Rectum

Simulating Carcinoma

CLIFFORD C. WILSON, M.D., AND ROBERT J. BOODY, M.D., *Kansas City*

THIS CASE IS reported because it illustrates a rare disease not heretofore reported in the literature to our knowledge. It also disproves some statements made by eminent surgeons with regard to diagnosing cancer of the rectum without biopsy. Gabriel[1] has stated that "the presence of palpable induration in the tumor (either at its base, in its substance, or at its periphery) or the presence of ulceration accompanied by induration affords the first and consequently the most important evidence of malignancy. If these ominous signs are detected, the surgeon is entitled to advise and carry into effect the radical operation indicated. I have never known a diagnosis on these grounds to prove incorrect." Jones[2] stated that one does not need a biopsy to diagnose cancer of the rectum providing he has an educated finger.

The case reported had two biopsies of the indurated area which did not reveal cancer. A surgical consultant, supported by the radiologist's findings, agreed that the tumor was malignant, even though the biopsies were negative, and that a radical operation should be done. Combined abdominoperineal resection was carried out leaving the patient with a permanent colostomy. The pathologic diagnosis was sclerosing lipogranuloma.

An extensive study was made of sclerosing lipogranuloma by Smetana and Bernhard[3] who reported fourteen cases, none involving the bowel. In nine cases the genital region was involved. Three involved the gluteal region, one the extremity and one the orbit. Of the nine genital cases, three had cutaneous lesions of an inflammatory nature, and in three there was no history of injury. They conclude that there is a great deal of uncertainty regarding the etiologic factors. Physical injury and the injection into the fatty tissues of some oily substances are probably the more common causes. "Traumatic sclerosing lipogranuloma is related to, but may be distinguished from, traumatic fat necrosis of the breast, pelvic lipogranuloma caused by iodized oils injected for uterosalpingography and other artificial lipogranulomas."

REPORT OF CASE

V. R. D., a well nourished, well developed 53 year old farmer reported to one of us (Dr. Boody) for a complete physical examination on April 24, 1953, because of insomnia. For ten years he was a heavy drinker, but had done no drinking in the last three years. Until two years previously he passed considerable gas and had severe constipation for which he had taken large quantities of mineral oil. At no time had he noticed any rectal bleeding. The patient gave no history of prostatic massages, injection treatments or physical injury.

The physical examination revealed nothing unusual except an indurated submucosal mass about 3 by 3 cm. on the anterior rectal wall at the level of the prostate. The sigmoidoscope revealed red and injected mucosa at the tumor level with some narrowing. There was no ulceration. The bowel was normal beyond this level.

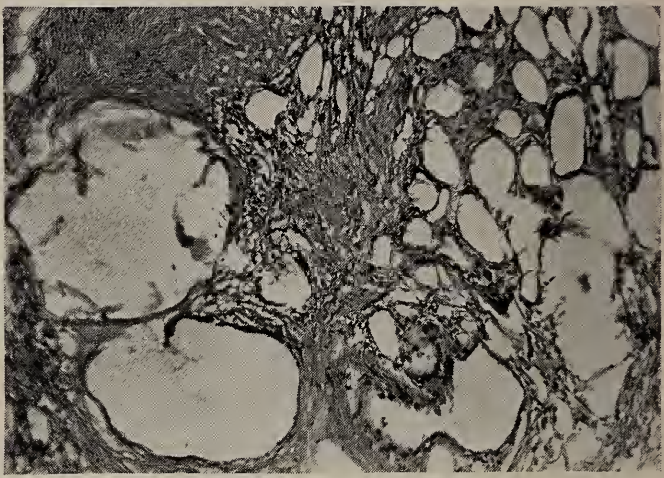

Fig. 1. Photomicrograph of fibrotic region in the muscle layer of the rectum. The open spaces contain sudanophilic material. H & E X55.

A barium enema demonstrated the mass which was clinically and radiologically considered to be a malignant tumor. In spite of two negative biopsies the authors and the consultants considered the case to be cancer and recommended radical surgery.

At operation (Miles abdominoperineal) the rectum separated from the prostatic capsule with a great deal of difficulty. The lesion was confined to the bowel wall, but was adherent to the prostatic capsule and the left lateral perirectal connective tissue. The gross specimen on removal resembled carcinoma in that the lesion caused a puckering of the bowel wall and formed a hard mass measuring about 3 by 1.5 cm.

Other than a somewhat prolonged postoperative ileus the patient's recovery was uneventful. Four months after the operation his wounds had healed and he appeared to be in good health.

Pathology. (J. H. Hill, M.D.)—Gross Description: The specimen consists of the terminal 30 cm. of the bowel comprising the rectum and anus. About 3 cm.

From the surgical service of Trinity Lutheran Hospital, Kansas City, Missouri.

from the mucocutaneous junction is an area of induration in the rectal wall and in the perirectal fat which is associated with puckering and constriction of the perirectal tissues. Aside from two small erosions representing the biopsy sites, the mucosa is intact. Gross section reveals diffuse fibrosis in the indurated areas involving all layers of the rectum for an area approximately 3 cm. in diameter and 2.0 cm. in thickness, with maximal involvement in the muscularis and in the perirectal fat. On the cut surface are scattered tiny cystic spaces filled with oily fluid. Four small inconspicuous lymph nodes are found in the perirectal fat.

Histopathology: In the indurated areas is a large amount of dense fibrous tissue located chiefly in the perirectal region and less prominently in the muscularis and submucosa. Numerous small open spaces which contain sudanophilic material are present in the fibrous tissue (fig. 1). The plane of excision passes through areas of active fat destruction (fig. 2) in which there are polymorphonuclear leukocytes, lymphocytes and macrophages. Necrosis is not a prominent feature; occasional multinucleated giant cells of the foreign body type are present. One of the small lymph nodes in the perirectal fat contains small groups of lipophages and small fat globules surrounded by a layer of swollen macrophages.

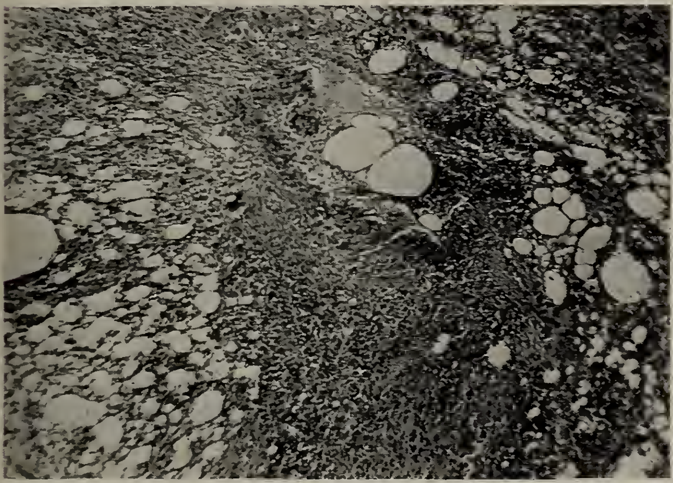

Fig. 2. Photomicrograph of area in perirectal region. There is focal necrosis, acute and chronic inflammatory reaction and destruction of fat. H & E X55.

Diagnosis: Sclerosing lipogranuloma involving the rectum and the perirectal fat.

Pathologic diagnosis confirmed by F. C. Helwig, M.D.

COMMENT

This peculiar granulomatous reaction, attributed to different causes, is most generally found in subcutaneous fat such as the female breast and the buttocks, but is also found in the penis, scrotum prostate and seminal vesicles, where fat does not occur. No explanation as to the presence of fat in these areas in which normally there is none has been offered.[5] Smetana and Bernhard stated that the persistence and progression of the lipogranulomatous process are difficult to understand. Instead of diminution of abnormal adipose tissue there is often an active increase. Sometimes the process extends into neighboring areas causing changes identical with those in the original lesion. It is this feature which in the absence of significant clinical signs of an inflammatory reaction suggests a neoplastic growth to the surgeon. In a few cases there may be a local recurrence. In one case reported there were recurrences over a period of four years and the patient was still in the hospital.

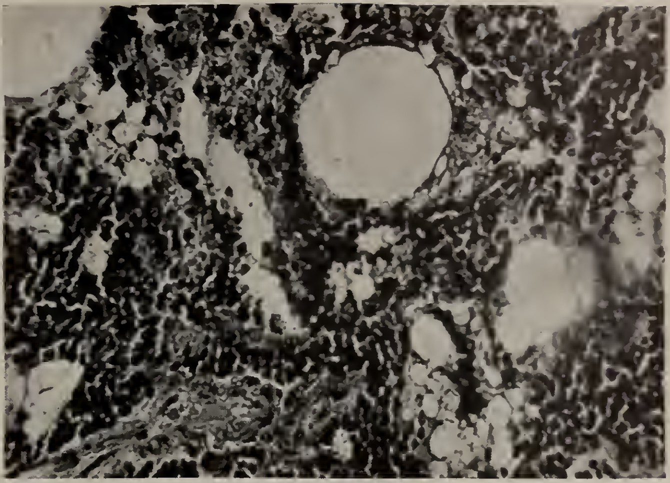

Fig. 3. Photomicrograph of area in regional lymph node. There are small groups of lipophages in the lymphoid tissue together with small fat globules surrounded by macrophages. H & E X231.

It is difficult to justify a radical operation for a benign lesion which leaves the patient with a permanent colostomy. A more radical biopsy might have revealed the true nature of the lesion. One could not be sure, however, that some part of the tumor was not malignant until it was all removed. The widespread involvement of the tumor in the bowel wall and in the prostatic capsule made radical local excision impractical. The possibility of obstruction following a less radical procedure cannot be excluded since sclerosing lipogranuloma is often a progressive disease. The only treatment known to influence the course of sclerosing lipogranuloma is the complete removal of the involved tissue.[3, 5]

When the biopsy slides were reviewed, evidence

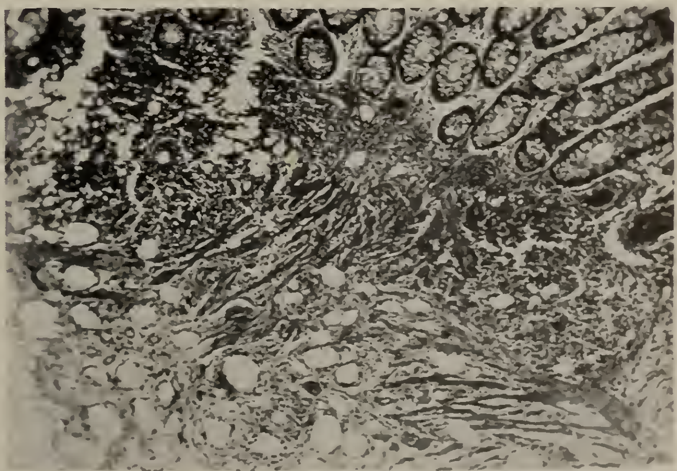

Fig. 4. Photomicrograph of biopsy specimen. Destruction of fat cells is present and associated with fibrosis. Groups of lipophages are present in the lymphoid nodules, H & E.

of fat destruction and fibrosis were noted beneath the mucosa. A lymphoid nodule contained groups of lipophages. These changes (fig. 4) were essentially similar to those in the main tumor mass.

SUMMARY AND CONCLUSIONS

1. A rare case of sclerosing lipogranuloma of the rectal wall, which clinically simulated carcinoma, is reported. The correct diagnosis was not made preoperatively.

2. Trauma seemingly could be excluded as a cause of the lipogranulomatous reaction. The only known possible etiologic factor was the ingestion of large quantities of mineral oil over a period of years.

3. Recurrence of the lesion in the prostatic capsule remains a possibility.

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Book Reviews

NUTRITION AND DIET IN HEALTH AND DISEASE, by James S. McLester, M.D., Professor of Medicine Emeritus, University of Alabama; and William J. Darby, M.D., Ph.D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. Sixth Edition. Philadelphia, W. B. Saunders Company. 1952. Price $10.00.

This is the sixth edition of this book first published in 1927. The text is divided into two separate sections. Each section is written entirely by one of the coauthors. The first section is devoted primarily to nutrition in healthy states. The second part deals with nutritional aspects of the diseased states. Section one opens with short discussions of digestion and metabolism. Somewhat more space is devoted in subsequent chapters to the vitamins and minerals. Types of food products, namely, milk, fish, meat and eggs are compared and described as to their caloric and percentage values. Additional chapters in part one discuss normal diets and sample diets of different age groups including infant feedings and nutrition in pregnancy.

Section two opens with discussions on the etiology, symptoms and treatment of the various diseases attribuatable to the vitamin deficiencies. Metabolic disorders such as diabetes mellitus, gout, and obesity are covered extremely well. The latter part of the text takes up the nutritional aspects of diseases of the various body systems including the hemopoetic, endocrine, skeletal, nervous, circulatory, digestive and genito-urinary systems. Two chapters are devoted to nutrition in surgery covering methods of feeding, dietary supplements and special diets.

The book concludes with an unusually complete appendix in which are found numerous charts of caloric values, age and weight charts, and sodium and potassium content of different foods and different city water supplies.

This book provides an excellent source of information which would be valuable to anyone in the practice of medicine regardless of specialty. J. D. G.

PRACTICAL X-RAY TREATMENT, by Arthur W. Erskine, M.D. Fourth Edition. Revised and Enlarged. The Bruce Publishing Company, St. Paul and Minneapolis. 1953. Price $5.00.

This text is a compilation of a well known, highly respected now deceased radiologist's life experience with the utilization of roentgen and radium in the treatment of benign and malignant diseases.

Approximately half of the book is dedicated to the basic principles of roentgen therapy. The remaining portion of the text is devoted to diseases amenable to irradiation with his personal method of treatment. The outline of roentgen dosages is given in detail and they vary somewhat from my experience and teaching, but radiology is an art; therefore, it is only natural that some variation would be present.

I highly recommend the book to those allied specialists and radiology residents interested in the theories underlying the principles of therapeutic radiology, but would discourage indiscriminate "recipe following" utilization of given dosages. D. C. W.

UNTOWARD REACTIONS OF CORTISONE AND ACTH, by Vincent J. Derbes, M.D., Associate Professor of Medicine, Tulane University of Louisiana School of Medicine; Head of Department of Allergy, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, La.; and Thomas E. Weiss, M.D., Instructor in Medicine, Tulane University of Louisiana School of Medicine; Member of Department of Medicine, Ochsner Clinic; Visiting Physician, Charity Hospital of Louisiana at New Orleans; and Staff Member, Foundation Hospital, New Orleans, La. Charles C Thomas, Springfield, Ill. Price $2.25.

Cortisone and ACTH, like most new drugs, have side effects, some beneficial and some harmful and, unlike most new drugs, are potent agents and affect many, if not all, organs and systems of the body. Considerable experience has been accumulated since their introduction. All of the experience in untoward reactions which had been presented in the literature is condensed and discussed in this short book. It is well written and easy to read. There is little argumentative material although debatable phases are discussed. Undoubtedly, most reactions will be noted and recorded in the future and far more will be known about the action of these drugs both in producing their beneficial effects and in causing harmful side reactions. As of this time, it is the best synopsis, with bibliography if further data is wanted, in print. This book should be read by all physicians who use these powerful therapeutic agents. S. L. G.

Special Articles

Healing of Body and Soul

EDMUND LISSACK, M.D., *Concordia, Missouri*

FROM THE BEGINNING of time pain and sickness and the fear of death have driven men to search for help beyond themselves. The ordinary problems of food and shelter and human relations have ably been coped with most of the time. But suffering and sickness have baffled and frightened all. So even primitive men turned to the supernatural. They both feared and followed witch doctors and medicine men who claimed to possess mysterious added powers that they shared with others through ceremonies and spells and tabus and charms. Even the chief of the tribe listened when these first physician-priests acted. Jesus was, therefore, filling an ancient role when he combined teaching and preaching and healing, for his master passion was to help men and women where they could not completely help themselves. All through history there has been this intimate relationship between the practice of religion and the practice of medicine.

Every true physician knows that in the course of ministering to the bodily needs of his patients many instances present themselves, from time to time, where the need of the soul are even more pressing than those of the body, or where at least the one cannot be satisfactorily treated without due attention being paid to the other. It is in just such cases as these that a kindly word spoken in season by the understanding physician will frequently bring more relief to a distressed mind or body than any medicine, the knife or elaborate scientific examination. The physician who is interested only in the physical well-being of his patient often fails to take advantage of the opportunity to do him the maximum amount of good. True religion and medicine should go hand in hand, as mutual and complimentary forces.

Physicians have often been either hostile or indifferent to the part which the minister can play in healing of the sick. Some physicians have tolerated the minister, feeling that while he cannot do much good neither can he do much harm; others have looked upon the clergyman as a bother and a nuisance—oftentimes regarding him with suspicion.

These attitudes may be based on good reasons. Ministers are sometimes tactless and indiscreet, and blunder into a sickroom not prepared to do any particular good. But some of the blame for the failure of the physician and the minister to work together can be charged directly to the medical profession. Probably the primary reason is the materialistic training of the medical profession. The physician looks for physical causes and treats them with material remedies. He deals constantly with the body and thus is in grave danger of thinking of man as being entirely physical. Probably no other profession is so strongly tempted to adopt a materialistic philosophy.

An authority has recently expressed the view that "Matter is no longer seen as a dull, lifeless substance but is believed to be spiritual in its ultimate form." If this is true, then other means than the material may be useful in the healing of the sick. It is at this point that religion comes into play, for one of religion's basic beliefs is that man is a spirit who possesses a body. Here the minister may be of real help to the physician.

And this leads us to note with delight that more and more doctors recognize the essential service that enlightened religion can render in the healing of sickness.

Great service has been rendered humanity by research in special fields but often the specialist may see the patient only in the light of his own specialty and fail to see him as a whole. The sick do not live by bread alone, nor by surgical, medical or nursing care. They need religion also because the heart, lungs, liver, and other organs are not independent, but are linked together with the nervous system and the conscious mind. It would be folly to help a patient in one respect and harm him in another. It would be stupid to give him good medicine and bad food, but doctors often try hard to improve a patient's sick body, forgetting to improve conditions which are harmful to his mind. The patient's interests, conflicts, emotions and, especially, his fears must also be considered.

When serious illness comes for the first time, it often strikes with sudden stunning surprise. Robust, exultant good health had been taken for granted. And now suddenly enters a strange new white world of pain and weakness and complete dependence and fear.

Who is to minister here? It would be much more satisfactory for the physician to do so but he often lacks the training and the time, so the minister is the logical person. In taking over, the minister must focus on two points. He must look upon the patient as a whole, including his hobbies, his family life, his friends and his hopes and fears, and he must make God real, seeking to strengthen the patient's faith to the highest degree.

Fear and loneliness are conditions needing special attention. Fear is akin to cancer in that it starts in a small way and spreads, slowly or rapidly, and, unless checked, saps vitality. Fears may be normal ones, such as the vague fears often experienced upon entering the hospital, fears of operation, fears of invalidism, fears of death.

The miracles of life and death are never commonplace. There are many mysteries still to be solved in the human body; the intricacies of the mind and its mechanism are still beyond our ken. We must reach those who come to us through their minds as well as their bodies. Given the stimulation and the reward of a mind so prepared for what is ahead so that we may minister to the needs of the body through a medium that is receptive and not resistant.

There may be, however, abnormal fears which do not come within the province of the minister to diagnose but should be treated as neurotic conditions by the physician. The minister, however, can mediate a quiet, calm faith in the reality of God.

The minister can help the patient overcome loneliness. Some people suffer bitterly from loneliness. The minister may contact the patient when he first comes to the hospital; when the first night draws near; when he starts off to the operating room; when visitors have been few.

The minister must realize that man is not a soul without a body; the physician must realize that man is not a body without a soul. A concord between these two greatest of all professions is urgently needed if the combined forces of science and religion are to be brought to bear upon a multitude of ills of mankind that are not amenable to ordinary material, medical remedies.

The Pope and Psychosurgery

REV. GERALD KELLY, S.J., *Ethics Consultant, Catholic Hospital Association*

On October 16, 1952, Pope Pius XII addressed the First International Congress on "The Histopathology of the Nervous System." The subject of his discourse was the moral limits of medical research and experimentation. In the course of his address he said that a man may not submit to medical procedures which alleviate physical or psychic illness, but which at the same time "involve the destruction or the diminution to a considerable and lasting extent of freedom—that is to say, of the human personality in its typical and characteristic functions. In that way man is degraded to the level of a purely sensory being—a being of acquired reflexes or a living automaton."

Doctors have asked me whether the Pope's words must be taken as an official Catholic disapproval of prefrontal lobotomy and other technics of psychosurgery. The correct answer to this question must have regard for what I might call a double contex: the verbal context, by which I mean the discourse itself; and the historical context, by which I mean the theological discussions of psychosurgery which preceded the discourse. An examination of both these contexts will show that the Pope was expressing no general condemnation of psychosurgery, but simply one limit to such procedures, a limit which is not only good morality but also good medicine.

VERBAL CONTEXT

Immediately preceding the passage referred to at the beginning of this article, the Pope had called attention to two fundamental principles of medical ethics. Defining a physician's right over his patient, he said: "A doctor has over his patient only the powers and rights he has received either explicitly or implicitly from the patient." This is a basic principle governing all physician-patient relationships. The doctor is certainly not the hired man of the patient. He is a professional man, using his professional judgment and skill in the interests of his patient. But in doing this he does act for the patient, that is, he exercises the patient's own natural right of self-preservation.

What of the patient—has he an unlimited right to surgery? The Pope calls attention to the truth that man is not an absolute master of himself. He is only the administrator of his body, with its members and functions. On the one hand, therefore, he is obliged to take reasonable means to preserve his bodily integrity; on the other hand he many sacrifice this natural integrity by having a member removed or a function suppressed when this is required for his total well-being. This is the second fundamental principle of medical ethics. It gives the norm for judging the morality of any mutilation: the well-being of the patient considered as a whole.

This brings us quite naturally to the question: what is the total well-being of the patient? It was with reference to this question that the Pope made the statement into which we are inquiring. His point was that in considering the well-being of the patient, one must consider the complete picture, the whole scale of values, and not merely one aspect. Thus a procedure which alleviates pain is a benefit to the patient; so too is a procedure which relieves the symptoms of mental illness. Yet, if such benefits are attained only at the expense of what is higher and nobler in man, his power to act as an intelligent and free being, then the law of ascending values is violated and the procedure is morally objectionable. This is by no means a condemnation of psychosurgery, though I think it may well be interpreted as a caution that psychosurgery, like other forms of surgery, is subject to the law that places the total well-being of the patient as a person above any particular benefit to the patient, as well as above any advancement in medical science which is obtained through treating the patient.

HISTORICAL CONTEXT

Papal statements on moral issues seldom enunciate anything completely new. Usually they are restatements, and sometimes crystallizations of discussions that have already been carried on by moral theologians. It helps, therefore, to know something of these theological discussions. Although psychosurgery is of recent origin, it is not so recent that moralists have not attempted to evaluate it. Let me outline briefly some of these attempts. Incidentally, all the articles I shall mention are primarily concerned with prefrontal lobotomy, but their conclusions would apply to any other form of psychosurgery.

The first moral appraisal of lobotomy that I have seen was published by Rev. Hugh Bihler, S.J., a psychologist. Father Bihler carefully described the operational technic and the favorable and unfavorable effects that might be expected. His tentative conclusion after a thorough study of the problem was that there was no reason for raising moral objections to the operation when it is confined to hopeless psychotics who have not been benefitted by the various shock therapies. As for neurotics, he thought we should reserve judgment until we know more of the possibilities of reeducating them and thus avoiding any permanent harmful effect of the operation.

Father Bihler's first article appeared in 1947. Five years later he published a reevaluation of lobotomy in the light of the most recent medical literature. He was still of the opinion that the operation might be justified as a last resort, but he stressed the need of preserving a conservative attitude and insisted that there had been too much experimentation.

Another American appraisal of lobotomy was published by Rev. Patrick O'Brien, C.M., in 1948. He believed the operation could be justified in the treatment of an affective and truly disabling psychosis, provided that other therapy had been tried first and that there was an assurance of competent care for a long period after the operation. The following year the revised edition of the Catholic Hospital code, which was drawn up by a large group of eminent physicians and moralists, formulated this working rule: "Lobotomy is morally justifiable as a last resort in attempting to cure those who suffer from serious mental illness. It is not allowed when less extreme measures are reasonably available or in cases in which the probability of harm outweighs the probability of benefit." This formula, it should be noted, is somewhat broader than Father O'Brien's conclusion. It does not specify the kind of mental illness and it does not explicitly demand the assurance of postoperative care. It leaves these matters to the prudent judgment of physicians.

In 1948, a French priest-psychiatrist, Rev. Joseph Géraud, wrote that as a therapeutic technic, prefrontal lobotomy was still in its infancy. As the matter stood at that time, however, he believed that the operation could be used as a last resort in the treatment of mental illness. Subsequently, *Cahiers Laënnec,* the official journal of the Catholic Physicians' Guilds in France, devoted a complete issue to psychosurgery, and the general trend of this discussion was that such operations should be considered justifiable under conditions similar to those outlined in our own hospital code.

In Ireland and England three comprehensive articles have been published on prefrontal lobotomy, by a psychologist, Dr. Ronan O'Rahilly, and by two moralists, Rev. John McCarthy and Rev. J. Diamond, S.J. These articles are characterized by a conservative approval of the operation for extreme cases, together with cautions against too much experimentation and particularly against failure to protect the rights of helpless patients. Father Diamond's conclusion should be of special interest to physicians:

"Finally, it seems true to say that psychosurgery has come to stay. Doubtless in the course of time new and less damaging technics will be evolved, but for the moment prefrontal leucotomy holds the field, and is the operation which has been considered in this article. From the moral point of view it is a form of mutilation, both anatomical and psychic, and therefore a procedure of last resort; it may not be used so long as any milder remedy is feasible, nor where there is no reasonable likelihood that it will be efficacious, nor where the malady is not sufficiently serious to justify so drastic a remedy. There is no doubt that in suitable cases leucotomy can be a means of great good, but the temptation to extend its use beyond what is justified is very great. The special nature of the operation places an added responsibility on the medical profession and a heavier burden in conscience. On the technical side the decision rests wholly with them, but in the case of a procedure which interferes so profoundly with personality, the decision cannot be a purely technical one. Respect must be had for the freedom and personality of the individual. To their honour be it said that the medical profession are not unappreciative of their responsibility, and that it is from them that have come the most outspoken condemnations of abuses."

CONCLUSION

The preceding survey shows clearly enough that Catholic moralists have not opposed the use of psychosurgery in the treatment of mental illness. Rather, they have consistently given a conservative approval to such operations, provided less radical procedures are not available or would be useless and provided they offer the patient a proportionate hope of benefit. The Pope's statement does not contradict this; it simply outlines a case in which there would not be a proportionate hope of real benefit.

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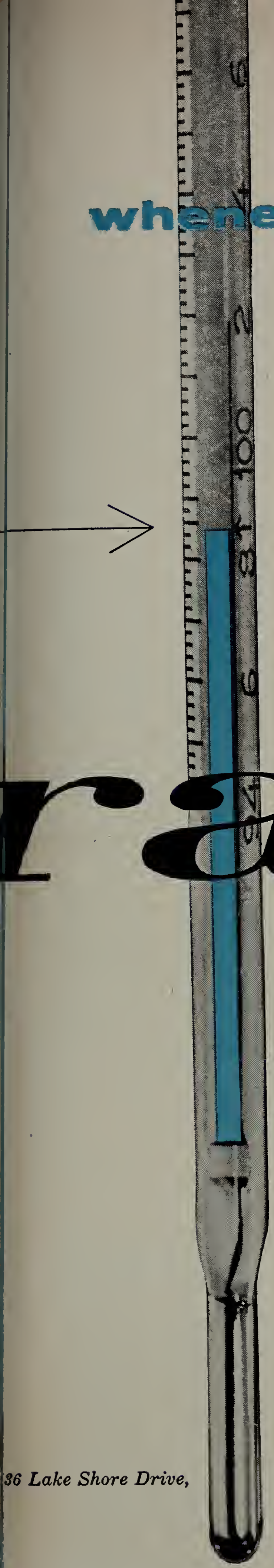

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**English, A. R., et al.: Antibiotics Annual (1953-1954), New York, Medical Encyclopedia, Inc., 1953, p. 70.*

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Cough Syrups

Jesse D. Rising, M.D.

In the spring a young man's fancy lightly turns to thoughts of love, but the poor old doc is too busy treating respiratory infections to have time for the finer things in life. At this season of the year, virtually every patient has a cough, but not all of them respond to the same type of medication. Most of us have recourse to Elixir of Terpin Hydrate and Codeine supplemented with one or two brightly colored and nicely flavored proprietary syrups—just to avoid the appearance of monotony. A glance at the label of one of these latter preparations is apt to be impressive because we see listed from four to twenty ingredients ranging from senega to tartar emetic. Only on closer scrutiny does it become apparent that the various medicaments are either pharmacologically inactive or are present in homeopathic doses. Two constituents are common to most cough remedies: some opiate (usually codeine) and sugar.

The majority of us feel quite inadequate to the task of designing a cough medicine that is tailor made for the average patient, but an understanding of a few general principles should simplify the matter. Certainly nothing could be more difficult than trying to make a logical selection for a particular patient from among the hundreds of proprietary products on the market.

Expectorants have been variously classified, to the confusion of all concerned. The term, expectorant, literally means "out of the chest," and does not logically apply to all cough medicines. It is probably better to call these preparations "antitussives," but I shall, in the interest of simplicity, resist the temptation to promote another term. Some sort of classification of cough relieving drugs is essential if one is to prescribe them according to the requirements of each individual patient.

Drugs which depress the overactive cough reflex are among the most important ones. They are, in general, opiates. Probably the most useful of the opiates is codeine phosphate; the more active ones are too addicting to be used safely and are often more potent than necessary anyway. An occasional extremely severe cough, including some of cardiac origin, will require morphine or dilaudid, but these patients do not fall in the "cough syrup group." Attempts to improve on codeine have brought into use ethylmorphine (dionin) and dihydrocodeine (hycodan). Both of these are more expensive and more addicting than codeine, and neither is superior as an antitussive drug.

Some years back, every discussion of the use of codeine as an antitussive revolved about the consideration of whether it was wise to depress the cough mechanism and permit the accumulation of mucus and pus in the lungs. It is now generally recognized that codeine is not capable of depressing the reflex to this extent (unless used to the point of general respiratory paralysis in pediatric practice), and that the drug is only useful in moderating the excessive, relatively unproductive, cough. The usual dosage is 8 mg. (gr. 1/8) for adults. This amount may be repeated at suitable intervals (averaging one to three hours) with satisfactory results. Larger individual doses accomplish little or nothing and there is some evidence that they may actually stimulate the cough reflex.

Liquefying expectorants facilitate expectoration by decreasing the viscosity of the sputum. There is no agreement as to the mechanism of their action, but it is likely that they act chiefly by causing gastric irritation. This initiates a reflex through the emetic pathways that promote an increase in the quantity of the tracheobronchial secretions and a decrease in their viscosity. Ammonium chloride has long been used for this purpose, but adequate doses (0.5 to 1 gram) are often too distasteful to the patient. There is one nauseant expectorant that is not distasteful, namely syrup of ipecac. It can be used in subemetic doses of 0.3 to 0.6 cc. (minims 2 to 4) for dry, irritating coughs in nearly any liquid vehicle.

Potassium iodide is a liquefying expectorant that seems to have a direct action on the entire bronchial tree, but it often causes local irritation sufficient to aggravate the cough associated with an acute process. Its chief usefulness is in the treatment of such chronic processes as bronchial asthma and bronchiectasis. Its use should be avoided when tuberculosis is a factor in the cough.

Locally acting agents may be either those which change the unpleasant tickling sensation in the pharynx to a more bearable one (heat or coolness) or ones which are soothing to the inflamed membranes. Menthol and chloroform are obvious representatives of the first class. Menthol in about 4 mg. (gr. 1/16) doses imparts a pleasant coolness to syrups, and chloroform in 4 to 8 mg. (gr. 1/16 to 1/8) is widely used for a similar effect. Alcohol, as in rock and rye, is another time honored member of this group, and is effectively used in the elixir of terpin hydrate. Indeed, the terpin hydrate in this excellent medicine is probably nothing more than a locally acting "stimulant" which gives many patients prompt relief of the annoying tickling by substituting a less unpleasant firey sensation.

The second class of locally acting agents, the soothing or demulcent drugs, includes licorice, glycerin, and most important of all—sugar. It is probably for this reason that "cough medicine" is practically synonymous with "cough syrup" in common usage; the syrup has a therapeutic as well as a vehicular function.

Bronchodilators are included in numerous shotgun cough remedies, but their usefulness is limited to asthmatic coughs. The physician should, when possible, differentiate coughs caused by respiratory infections from those that are asthmatic in origin. For the latter the sympathetic amines, such as ephedrine, are of value. Ephedrine sulfate is often prescribed with potassium iodide as an expectorant. It is usually desirable to add a barbiturate to correct the cerebral stimulation caused by ephedrine. The usual dose of ephedrine for this purpose is 15 to 20 mg. (gr.¼ to 1/3), and a like amount of phenobarbital sodium or pentobarbital sodium, or both, is about right as a corrective and mild sedative.

Antihistamines are no longer considered to be preventives or specifics for "the common cold," but they often ameliorate many of the symptoms including cough, especially if an allergic element is involved. They are not particularly helpful in the treatment of full blown asthma.

In summary, one might say that a good cough medication should be specifically designed for the patient and the type of cough that requires treatment. It need not be complex:

1. An excessive cough is an indication for codeine.
2. Acute dry congestion and thick secretions call for a liquefying expectorant, such as syrup of ipecac in subnauseant amounts.
3. Pharyngeal irritation may respond best to a preparation thick with sugar and pungent with menthol or chloroform, or to one spiced with alcohol and an aromatic such as terpin hydrate or creosote.
4. Chronic coughs (except tuberculosis) may respond to potassium iodide when all else fails.
5. Ephedrine and its relatives are mainly useful if asthma is the basis of the cough. They go well with potassium iodide.

Antihistamines seem to be especially helpful in treating coughs in allergic youngsters.

A few sample prescriptions may illustrate these principles. For example, the patient with "flu" and a racking, dry cough will benefit from:

Codeine Phosphate	0.25
Syrup of Ipecac	10.
Syrup of Citric Acid q.s.ad	120.

A person with "smoker's throat," postnasal drip and similar conditions, often gets relief from:

℞ (Codeine Phosphate)	0.250
Menthol (and/or)	0.125
Chloroform	0.125
Syrup of Tame Cherry q.s.ad	120.

The "chronic" with profuse but thick sputum can be given potassium iodide drops or:

℞ Solution of Potassium Iodide	16.
Compound Syrup of Sarsaparilla q.s.ad	240.

Bronchodilators can effectively be administered to mild asthmatics as:

℞ Pentobarbital Sodium	0.125
Phenobarbital Sodium	0.125
Ephedrine Sulfate	0.250
Potassium Iodide	8.
Syrup of Tolu q.s.ad	120.

Finally, a youngster who has frequent upper respiratory infections and excessive coughs or croup may be basically allergic, in which case the following may help considerably:

℞ Syr. Ipecac	4.
Elixir. Benadryl (Pyrabenzamine, etc.) q.s.	60.

These basic prescriptions are subject to infinite variation at the discretion of the physician; they are simple and inexpensive and most of them are quite palatable.

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Every man owes a part of his time and his money to the profession in which he is engaged.—Theodore Roosevelt.

Among Ourselves

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He'll Be Missed

As we meet again next week for our Annual Meeting, the many friends of Claude Bohrer will feel his absence keenly. No one could ever describe him as a dominating, driving personality. Instead, everyone around him sensed the quiet, solid, unobtrusive calm of his unhurried, deliberate and profound leadership.

Such a man was Dr. Bohrer that he had many scholarly facets, other than those of a physician. His love of music, of literature, of philosophy, of religion, of so many other good things in life, these stamped him a lovable, all-around man, "a compleat man."

As he grew older, other hobbies and diversions absorbed him; again, demonstrating his protean and catholic tastes for life in its grandest, broadest form.

Menaced with the over-hanging shadows of physical distress, our President realized the considerable probability of his early death. Yet, when physically able, he carried out the duties and responsibilities of his office until the last. Perhaps this sobering, somber knowledge gave weight to his activities as our President, since no act of his was characterized by any undue bombast or show, always with an orderly, efficient and subdued manner bespeaking sincerity and selflessness.

We believe this is the first time, in well over one hundred years of the Missouri State Medical Association's history, that a President of our organization has died while occupying this position. To be sure, there will be present those who have been elected to succeed Claude during the coming year. And, of course, we have others delegated to serve in the President's absence. We doubt not these men will carry out their duties in a perfectly satisfactory manner. But, it won't seem quite the same without that quiet, smiling, unassuming friend of ours on the scene.

He'll be missed!

Vincent T. Williams, M.D.

The Camel Has His Foot in the Tent

As a boy we have vivid memories of medicine shows—and, strange to say, not bitter memories. There was much excitement when a half-dozen or more horse or mule drawn wagons came to town. By night they had their tent up and also the plank seats and the performers platform. Numerous gasoline flares gave the necessary glare and somehow the workers and roustabouts contrived to have a band—a good band in our untutored memory. A crowd gathered—enjoyed the music and then the free show.

After the show, and only after the show, were those who chose to remain told of the wonderful medicine for sale. One contained something good for the liver, and, at the same time, a medicine excellent for the heart and another splendid for the kidneys. You just could not go wrong on this.

I can still remember my grandfather "shelling out" for three bottles at the price of two. But those people kept out of our homes, and no attempts at sales were made during the entertainment. How different since the advent and development of radio—and especially, television.

Now the patent medicine advertisers are in our homes—cars—stores—and what not. If you turn on your radio or television set you have to listen to their "malarkey."

It is a racket now in its full bloom. They are all irritating and some crude. The one that goads us the most is the program advertising a blood remedy—it has the unmitigated gall to say in reference to a certain blood condition, "doctors call it an iron deficiency anemia but WE call it tired blood." Sooner or later in the public's interest a halt will have to be called on all this.

F. T. H'DOUBLER, M.D.

The Modern Socialistic Trend

The science of medicine has progressed steadily throughout the ages. Combating witchcraft and superstition, it has evolved to its present status. In the United States it is the best in the world. Then why the cry for "free" medicine. Admittedly it is based on a two-fold causation, the modern socialistic trend and economics. How did this come to pass?

First, the socialistic trend:

In the formative days when life was simple and necessities and luxuries few, the good old country doctor was the backbone of every community. His wants and needs were also few, his taxes nil. As our nation progressed agriculturally, so did it progress medically. Then suddenly our American way of life was revolutionized by that great industrialist, Henry Ford. His cheap, safe and serviceable car fostered prosperity and industrial expansion. America was growing up. Along with growth came the growing pains of automobile, gasoline and road taxes. Rightly so, but this decidedly elevated the cost of living. The doctor, usually the first in his community to adopt the new invention, still drove Old Dobbin in the rough backwoods areas, but progress he would with his new Ford in the cities.

Then came World War I, followed by a lush prosperity which was foredoomed to collapse into a depression. Suffering out this long siege with his fellow Americans, the doctor cared for his physically and mentally ill patients, hopelessly helping them in their search for employment. His remuneration was little from his patients and less from his government. During these years socialism was born. The "gimme" philosophy governed.

To break the spell World War II entered the picture with the wheels of progress and destruction grinding each other into dust. Socialism still survived, thanks to our comrades and "Uncle Joe." The war's end brought the clamor for peacetime products with a return of prosperity. Again socialism did not perish. The age of "Red Herring and Trumanism" had arrived to sustain it. Politicians promised "free" medical care for votes.

Today, after Korea, the modern socialistic trend has slackened, but we face a far greater threat of which I will discuss the automotive phase next.

MARTYN SCHATTYN, M.D.

Reduction of the Dislocated Shoulder

Dislocation of the shoulder is the most common dislocation of any joint and comprises 50 per cent of all dislocations (Key and Conwell: The Management of Fractures, Dislocations and Sprains, The C. V. Mosby Co., 1951). Of all the texts on orthopedics and general surgery published in the last three years, only one in the former and two in the latter group mention the abduction technic of reduction, described in recent years by Henry Milch of New York (J. Bone & Joint Surg. 31:173-179 (January) 1949). Its value is apparently not generally appreciated.

Dislocation of the shoulder occurs from a fall or blow on the abducted arm, the force tending to increase the abduction. The abduction method of reduction simply reverses this course of events. As pointed out by Milch, with the arm in complete abduction, all the shoulder muscles form four groups of cones, the apices of which all lie in the axis of the humerus. The minimal pain and ease of reduction in the position argue for the minimal trauma of reduction. In the acute dislocation, if care and gentleness are observed, the dislocation can be reduced without general anesthesia and only a hypodermic of Demerol in the apprehensive patient.

The method as described by Milch is as follows: "The patient lies in the supine position, while the surgeon takes his position on the side of the dislocation. In a right sided dislocation the surgeon places his right hand upon the patient's right shoulder, so that the fingers find firm support on the top of the shoulder, while the thumb is braced against the dislocated humeral head. . . . The right hand fixes the head as the left hand gently abducts the arm into the overhead position. . . . During this maneuvre the head of the humerus is supported so that it cannot move from its dislocated position. As a consequence, instead of moving downward as the arm moves upward, the head rotates in place. In this manner the tendency to further stretch already stressed nerves is obviated. . . . Once the arm has been brought into complete abduction in this overhead position, all cross-stresses exerted by all the muscles have been eliminated; the head can be gently pushed over the rim of the glenoid and the dislocation reduced."

AVERY P. ROWLETTE, M.D.

Fraternally Yours

Chit-Chat of This and That

While in a congratulatory, mellow mood, we doff our hat to the new *Cape Girardeau County Journal.* They turn out a journal vastly superior to many county societies having a membership in the hundreds, and they have about thirty-five members! Congratulations, fellows of SEMO, keep up the good work; may other societies (big and small) take note.

We are particularly intrigued with the pungent, staccatto editorials of editor Trolinger—how's about joining the MISSOURI MEDICINE team?

In the same mood, this would be a good time to tell the other Missouri boys who run county society bulletins what a grand job we think they're doing.

For instance, Greene County (since the old days of Dr. Cole) has always put out a distinctive, individualistic, an always interesting, copy. The Pettis County boys are picking up, and the Buchanan County Bulletin seems on the upgrade. Modesty forbids our over-praising the Jackson County organ, but we will say we're proud of it. Then comes the "Big Two," the *St. Louis Medical Society Bulletin,* and the *St. Louis County Medical Society Bulletin;* everyone accepts them as top-flight publications. To all of these—we apologize if we've forgotten anybody—we extend our heartiest and sincerest congratulations.

In our exchange of county society bulletins from all over the country, we think Missouri medical journalism is definitely on a par with other areas, superior to some.

Perhaps medical journalism in Missouri could be developed, comparable to the Hoosier school of writers of about a half-century ago. Remember them—Tarkington, Lardner, et al?

Might be something in this idea, with the Missouri University School of Journalism one of the best, maybe there's something in the air, the water, the soil, with only one essential ingredient necessary—work!

* * *

On this business of medical writing, have you talked with high school kids in your community about taking up medical writing as a profession? As you know, Missouri University School of Journalism and the University of Illinois School of Journalism are the first to offer such a course.

Many high school youngsters look to their family physicians as their father-confessors, as advisors on all subjects. This might be really red-hot for some kid who asks your advice. Particularly, if he (or she) shows an aptitude for scientific things and any flair for writing. Think it over. Remember, the University of Missouri School of Journalism offers such a course. And, better still, pass this word along to principals or the vocational counselors of your high schools.

Full information is available from our friend, Harold Swanberg, M.D., Quincy, Illinois.

* * *

While we're passing out orchids, let's tip our hat to the Eli Lilly Co., who recently sent out 29 tons of pharmaceuticals to Dr. Albert Schweitzer, winner of the 1952 Nobel Peace Prize, down in steaming Lamberene, French Equatorial Africa. Not long ago, Emma Haussknecht, Schweitzer's head nurse for twenty-eight years, accepted two big trailer-trucks, leaded with drugs for shipment. Dr. Schweitzer cares for 245 lepers, and 230 other patients in his thatched-roof hospital. He is busy now constructing permanent hospital facilities, financed by the $33,840 Nobel prize money.

In addition to being a Christ-like physician, Dr. Schweitzer is a world authority on the great composer, Johann Sebastian Bach (his records of this master's organ music helps support his hospital). He also has written authoritative texts on the science of organ-building. We heard some radio commentator talking about Dr. Schweitzer as a candidate for "The Man of the Year." Our question—which year? Our answer—any year!

Much thanks to our pharmaceutical friends, the Eli Lilly Co., for this noble gesture!

Have you seen the ads Parke, Davis and Co. are putting out, trying to help millions of people to help themselves in the series, "How to Select a Family Doctor?"

In these ads, Parke, Davis emphasizes "too many people wait until a crisis compels them to summon a doctor. They forget that the crisis might not have become a crisis at all if a physician had been consulted on a regular basis." Then they recommend, "If you don't have a family doctor now, here are three simple suggestions to help you: (1) Ask your county medical society for a list of qualified physicians. (2) Ask a local hospital or your pharmacist for the names of three or more physicians. (3) Visit several doctors before you make your choice." Thank you, Parke, Davis & Co., for this intelligent series of ads. (Note the parallelism in the January *Medical Economics* article, "Looking for a Lawyer?")

We have heard of other drugs-houses, in addition to the above, who have made similar, significant contributions, will cover them later.

Another group which deserves our commendation, as a state journal and as a profession, is the United Fruit Company for their ads, scientifically-accurate, free of flamboyant claims, and of sane, helpful content in their approach to the public!

See you next week at the Annual Meeting in St. Louis.

V.T.W.

Missouri Medical Meetings

Missouri State Medical Association Annual Session, St. Louis, April 4-7, 1954.

St. Joseph Clinical Society Annual Meeting, Hotel Robidoux, St. Joseph, April 22, 1954.

Missouri Health Council Annual Spring Conference, Governor Hotel, Jefferson City, April 30, 1954.

Missouri Public Health Association Annual Meeting, St. Joseph, May 6-8, 1954.

School Health Education Workshop, at Central Missouri State College, Warrensburg, July 6-8, 1954.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p. m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

More and more large medical societies are sponsoring Health Forums for public consumption. However, few small societies have tackled this project. The Pettis County Medical Society with approximately thirty members and the Sedalia *Democrat-Capital Daily* are cosponsoring a series of three medical forums at Sedalia beginning in April. The newspaper will furnish all the publicity and the society the program. This society has also recently furnished 500 copies of a directory of its members to the local Welcome Wagon personnel. The directory includes helpful suggestions to newcomers concerning their medical care problems.

Monday night, March 1, the Jefferson County Chamber of Commerce sponsored a dinner meeting, bringing together leading citizens from all over the county to hear a discussion on the functions of a county health department and the cooperative aspects of public health activities and private medicine. The meeting was held at the high school in Hillsboro with 200 people on hand. Dr. A. E. Spelman, Smithville, Chairman, Committee on Rural Medical Service, M.S.M.A., was the principal speaker of the evening. The occasion was given impetus by the recent completion of a new $90,000 County Health Center to serve as headquarters for the County Health Department. This health department, or unit, is administered by a five man board elected by the voters of the county and financed by a mill tax. Three of the five members of the present board are doctors, members of the Jefferson County Medical Society. Dr. Carl E. Rice is full time Director of the department. This entire unit has been set up under the new Missouri County Health Center Law.

The program for the Annual Spring Conference of the Missouri Health Council on April 30, is published elsewhere in this issue. This program on Health Insurance is designed to cover a lot of "water front." For instance, Mr. Parke M. Banta, General Counsel for the Department of Health, Education and Welfare, Washington, D. C., has accepted an invitation to discuss the Administration's Health Program.

Members in the News

Austin Smith, M.D., Editor of *The Journal of the American Medical Association*, spoke in Kansas City under the auspices of the Jackson County Medical Society and the Greater Kansas City Heart Association.

It has been announced that new facilities of the Marshall-Carrollton School for Feeble Minded Epileptics will be built at Higginsville to increase the facilities for such patients by about 500.

Kansas City physician, **Claude J. Hunt**, M.D., spoke to the Southeastern Surgical Congress in Birmingham on "Surgical Decompression of the Acutely Obstructed Colon."

Members of the Buchanan County Medical Society heard **William B. Kountz**, M.D., St. Louis, speak on "Heart Problems of the Aged."

The annual meeting of the St. Joseph Clinical Society will be held April 22 at Hotel Robidoux in St. Joseph.

At a seminar in Birmingham sponsored by the American Cancer Society, **Richard L. Sutton, Jr.**, M.D., spoke on "Early Stages, Recognition and Treatment of Carcinoma of the Skin."

Guest speaker, **F. Stanley Morest**, M.D., Kansas City, addressed the Clay County Medical Society on "Recognition of Atypical Types of Coronary Occlusion and Management of Complications."

The Excelsior Springs Kiwanis Club heard **Carl R. Ferris**, M.D., Kansas City, speak on "Heart Disease."

At the first session of a Nursing Conference at Red Cross headquarters in Kansas City **Ralph R. Coffey**, M.D., spoke on "Red Cross Medical Responsibilities in Disaster."

Wallace H. Graham, M.D., Kansas City, spoke to the Young Matrons Club on "Customs, Clothing, Personalities and Travel Experiences in the Middle East."

Miss Elizabeth Martin, Superintendent of Kansas City Children's Mercy Hospital, has reported on the expenditure of $10,874.04 from the Kansas City Open Golf Tournament last summer. The hospital again will be the beneficiary of the 1954 Kansas City Open to be held July 30 to August 2 at the Blue Hills Golf Course.

Among guest lecturers at the sixth annual Neuropsychiatric meeting at the VA Hospital, North Little Rock, Arkansas, **Henry G. Schwartz**, M.D., St. Louis, was listed as a guest speaker.

Interviewed in connection with his lecture to the Jackson County Health Forum, Anton J. Carlson, M.D., Chicago, listed as his formula for a full life "three w's and three d's, work work work, from diaper days to death."

Roughly coinciding with State Patrol Districts, ten districts for the organization of Medical units on civil defense were set up. **Carroll P. Hungate**, M.D., Kansas City, President, emphasized the fact that in the event of atomic attack metropolitan areas would be knocked out and medical treatment would have to come from rural communities.

The Atomic Energy Commission has renewed a $16,686 grant to St. Louis University School of Medicine for the effects of radiation on rickettsial and virus infections.

A group of St. Louis University School of Medicine faculty members conducted a panel discussion on chest disease late in February at St. Francis Hospital, Cape Girardeau. Moderated by **Paul Murphy**, M.D., speakers included **Herbert C. Sweet**, M.D., **Joseph L. Lucido**, M.D., **John Wyatt**, M.D., **William A. Werner**, M.D.

The Audrain County Medical Society, meeting in Mexico, heard **E. H. Burford**, M.D., St. Louis, speak on "Urological Problems and Their Treatment for the General Practitioner."

The annual Hanau W. Loeb lecture at the St. Louis University School of Medicine, sponsored by the Phi Delta Epsilon Fraternity, on "Experimental Production of Avirulent Variants of Poliomeylitis Virus" was delivered by Albert Bruce Sabin, M.D., Professor of Research Pediatrics, The Childrens Hospital Research Foundation, Cincinnati.

Administrator of the Baptist Memorial Hospital, due to be completed in Kansas City early in 1955, is Jerry P. Smith. Mr. Smith was formerly assistant administrator of the Baptist Memorial Hospital in Memphis.

Stanley F. Hampton, M.D., St. Louis, spoke to the Michigan Clinical Institute in Detroit on "Differential Diagnosis and Treatment of Extrinsic and Intrinsic Asthma."

Kansas City physiciatrist, **Louis Forman**, M.D., gave three lectures under the auspices of the School of Jewish Studies in that city.

Kansas University Associate Professor of Pathology, Leland Stoddard, M.D., was the guest of the Department of Pathology of St. Louis University in March. Dr. Stoddard conducted several lectures, discussions and consultations while in St. Louis. A similar program later in March featured University of Wisconsin Pathologist John Harmom, M.D.

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1. Cowart, E. C., Jr.: Mississippi Doctor 29:278 (April) 1952.
2. Sayer, R. J., et al.: Am. J. M Sc. 221:256 (March) 1951.
3. Knight, V.: New York State J. Med. 50:2173 (Sept. 15) 1950.
4. Trafton, H. M., and Lind, H. E.: J. Urol. 69:315 (Feb.) 1953.

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Kansas City St. Joseph Hospital, whose laundry modernization was featured in an item in the *Kansas City Star,* reported that in the ten weeks when their own laundry was shut down, the bill for sending out laundry amounted to $18,000. Projected into a year this item alone would amount to almost $100,000.

High tribute was paid to **Charles C. Conover,** M.D., Kansas City, by the medical staff and trustees of the Trinity Lutheran Hospital. The occasion for the review of his 53 years in the practice of medicine was the unveiling of a portrait of the physician given to the hospital by the medical staff.

The largest single contribution to the Kansas City St. Vincent's Hospital Expansion program, to date, is $12,000 from The Greater Kansas City Laborers District Council. Construction is scheduled to start on the new building in about thirty days.

Hugh Hamilton, M.D., Kansas City, was a guest lecturer at the Mid-South Post Graduate Assembly in Memphis. Dr. Hamilton spoke on "Metabolic Concept of Gyneological Care" and "Iron Metabolism in Pregnancy."

Filling the vacancy caused by the death of Herbert L. Mantz, M.D., **Martin J. Mueller,** M.D., has been appointed as Medical Consultant for the Kansas City Office of Vocational Rehabilitation.

After a twenty-five year absence from Columbia, where he previously had taught school, **Roland L. Wiggins,** M.D., has opened his offices for the practice of internal medicine in that city.

Kirkwood physicians, **Lois C. Wyatt,** M.D., and **Rosemary R. Larkin,** M.D., have opened new offices.

After repeal of an old law preventing out of state doctors from holding such an office, **L. C. Calvert,** M.D., Weston, was elected president of the staff of St. Johns Hospital, Leavenworth, Kansas.

It has been announced that plans are under way for a $2,000,000 building program at St. Joseph's Hospital, St. Joseph.

The medical advisor for the recently organized Clay County Cancer Society is **George Sanders, M.D.,** Excelsior Springs.

Assistant Professor of Pediatrics at Washington University School of Medicine, **H. E. Wachter,** M.D., has associated with **H. E. Petersen,** M.D., St. Joseph.

In honor of his 53 years in medicine of which 38 have been spent in Carl Junction, **Omer L. Alberty,** M.D., was honored by the Jasper County Medical Society, Lions Club and other civic organizations.

The Cape Girardeau *Southeast Missourian* featured a summary of the need for increased hospital facilities in that city. The feature brought out the viewpoints of three hospital administrators: Herbert S. Wright, Superintendent of the Southeast Missouri Hospital, A. E. O'Hara, Superintendent of the Cape Osteopathic Hospital, and Sister Carola, Administrator of St. Francis Hospital.

The first E. Van Norman Emery Memorial Lecture was given by Dr. Milton Rosenbaum on "Psychomatic Factors in Illness" and "The Role of the Father" at Brown Hall, Washington University.

The St. Louis Academy of General Practice heard **William A. Sodeman,** M.D., Professor of Medicine at MU discuss "Choice of Antibiotics in Therapy."

About 125 hospital administrators and directors of nurses from twenty-five states attended a recent Nursing Service Administration Institute in Kansas City.

The *Kansas City Star* carried a feature story by Chester A. Bradley on improvements, plans and current facilities at the Missouri State Sanatorium at Mt. Vernon. A former patient, **C. A. Brasher,** M.D., is superintendent and **C. E. Hellweg,** M.D., is assistant superintendent.

Medical director of City Hospital, St. Louis, **Cyril Costello,** M.D., spoke to the Chariton-Macon-Monroe-Randolph County Medical Society in Moberly on "Peripheral Vascular Disease."

Richmond physician, **M. L. Masterson,** M.D., has been ordered to active duty with the Air Force. Approximately 40 persons attended a farewell dinner given in Lexington by the Lafayette-Ray County Medical Society at which **Joe W. Ward,** M.D., Lexington, presided.

The Boonville Medical Group has announced the association of **D. J. Brown, Jr.,** M.D.

Progress is being made on solicitation for the Jefferson Memorial Hospital in Jefferson County. Total contributions of $350,000 are sought to match a similar federal allocation.

F. L. Edwards, M.D., Monett, has moved into new offices after being associated with **F. T. Kerr,** M.D., for three years.

Nevada MoMedic, **William H. Allen,** M.D., has occupied new office space in that city.

The Nodaway County Judges have appointed **Robert E. Dunshee,** M.D., as county physician. Dr. Dunshee, who located in Maryville in the fall of 1953, replaces **L. E. Dean,** M.D. in the appointed post.

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Robert E. Bruner, M.D., addressed the Polk County (Iowa) Association for parents of retarded children in Des Moines on February 22. His subject was "The Brain Damaged Child and the Development of Community Programs for Their Care and Training."

The St. Louis City Hospital Alumni Association will have a dinner and meeting on April 3, at the Starlight Roof, Hotel Chase, St. Louis, beginning at 6:30 p.m. "Stretch" Miller, sportscaster for Radio Station WIL, St. Louis, will be the speaker. Reservations should be sent, together with $7.50 for dinner and annual dues, to **Joseph C. Peden, Jr.**, M.D., St. Louis City Hospital, 1515 Lafayette Ave., St. Louis 4.

On Wednesday, April 7, at 12:30 noon, **Mr. Powell McHaney** will speak before the University of Missouri Medical School Alumni Association in Room 8 at the Jefferson Hotel. At this luncheon meeting Mr. McHaney will bring up to date information on the new Medical School at the University of Missouri.

"Medical-Legal Investigation of Death in the Public Interest" will be the subject presented by **Russell S. Fisher**, M.D., Chief Medical Examiner for the State of Maryland, Professor of Legal Medicine of the University of Maryland and Lecturer on Forensic Medicine of Johns Hopkins University, on April 3, 8:30 p. m., St. Louis Medical Society Auditorium, St. Louis. This meeting is open to the general public and is presented by the Missouri Society of Pathologists and the St. Louis Medical Society.

At the annual meeting on February 7 of the Midwest Section of the Association for Research in Ophthalmology held at the University of Chicago, **Paul W. Miles**, M.D., St. Louis, was elected chairman.

Thomas H. Burford, M.D., St. Louis, will be a guest instructor at a Postgraduate Course in Pulmonary Diseases at the University of Oklahoma School of Medicine, Oklahoma City, April 9 and 10.

IN MEMORIAM

Shy, James C., M.D., St. Louis, a graduate of the University of Colorado School of Medicine, 1943; member of the St. Louis Medical Society; aged 36; died January 22.

Matthews, Gilpin L., M.D., Beaufort, a graduate of St. Louis University School of Medicine, 1911; member of the Franklin-Gasconade-Warren County Medical Society; aged 75; died February 1.

Senseney, Eugene, M.D., St. Louis, a graduate of Washington University School of Medicine, 1905; honor member of the St. Louis Medical Society; aged 74; died February 10.

Popejoy, H. R., M.D., California, a graduate of Missouri Medical College, 1891; honor member of the Moniteau County Medical Society; aged 99; died February 12.

Reed, Carl H., M.D., Carrollton, a graduate of Washington University School of Medicine, 1922; member of the Grand River County Medical Society; aged 65; died February 17.

Wilson, Fernando I., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1921; member of the Jackson County Medical Society; aged 60; died February 23.

Grim, George E., M.D., Kirksville, a graduate of Washington University School of Medicine, 1933; member of the North Central Counties Medical Society; aged 46; died March 2.

NEW MEMBERS

Barbour, Marvin R., M.D., Poplar Bluff
Berenson, Sheldon E., M.D., Kansas City
Carleton, Charles E., Jr., M.D., Farmington
Crosby, Alice Stryker, M.D., Salem
King, Walter Robert, M.D., Kansas City
Marsh, Alice, M.D., Kansas City, Kansas
May, James W., M.D., Kansas City
Middleton, John W., M.D., Louisiana
Mullen, Jack, M.D., Bonne Terre
Sanders, Harmon U., Jr., M.D., Independence
Van Buskirk, William C., M.D., Kansas City
Wheeler, J. D., M.D., Mountain Grove

County Society Honor Roll—1954

(Societies which have paid dues for all members and date placed on Honor Roll)

Benton County Medical Society—November 19, 1953
Perry County Medical Society—November 20, 1953
Webster County Medical Society—December 2, 1953
Carter-Shannon County Medical Society—December 4, 1953
Laclede County Medical Society—December 14, 1953
Miller County Medical Society—December 18, 1953
Montgomery County Medical Society—December 19, 1953
Moniteau County Medical Society—December 22, 1953
Lewis-Clark-Scotland County Medical Society—December 24, 1953
Audrain County Medical Society—January 2, 1954
Barton-Dade County Medical Society—January 5, 1954
Henry County Medical Society—January 13, 1954
Howard County Medical Society—January 15, 1954
Dallas-Hickory-Polk County Medical Society—February 1, 1954
Morgan County Medical Society—February 8, 1954
Camden County Medical Society—February 16, 1954
Mineral Area County Medical Society—February 17, 1954
Pike County Medical Society—February 20, 1954
Pettis County Medical Society—March 1, 1954

Councilor District News

FIRST COUNCILOR DISTRICT

Grand River Medical Society

Fifty-eight persons, including doctors, their wives and guests, attended a dinner meeting of the Grand River Medical Society and its Auxiliary, Thursday night, February 11, at the Strand Hotel, Chillicothe. Following a delightful smorgasbord dinner the meeting adjourned to reconvene immediately in two separate sessions, one the medical society and the other the Woman's Auxiliary.

Discussions were formal and informal.

The program for the latter presented Mr. Christian Stipp, Carrollton, State Representative from Carroll County, who gave an interesting talk.

A smorgasbord dinner was enjoyed before the meetings.

The scientific program for the medical society was as follows: **Henry Willumsen**, M.D., St. Joseph, spoke on "Obstetrical Complications," and **George W. Forman**, M.D., St. Joseph, discussed "Neurological Problems in General Practice." The business part of the meeting considered an extensive report from the Council of the State Medical Association as presented by Dr. **Donald Dowell**, Councilor.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DICTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph Counties Medical Society

Dr. **Cyril Costello**, Medical Director of City Hospital, St. Louis, was the guest speaker at the February 11 meeting of the Chariton-Macon-Monroe-Randolph Counties Medical Society at the Woodland Hospital, Moberly. His subject was "Peripheral Vascular Diseases."

Twenty-three physicians were in attendance to hear this interesting and informative talk.

W. D. Chute, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Lincoln-St. Charles County Medical Society

James F. Dowd, M.D., Plastic Surgeon, St. Louis, spoke at a dinner meeting of the Lincoln-St. Charles County Medical Society at the Southern Air, Wentzville, Thursday night, February 18. He discussed "The Treatment of Common Facial Injuries Resulting from Automobile Accidents."

Seventeen physicians were present including Dr. **Guy Magness**, University City, President of the Missouri State Medical Association, and Dr. **Otto Koch**, Clayton, Councilor.

Joseph C. Creech, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain County Medical Society was held in the new wing of the Audrain County Hospital, Mexico, Tuesday night, February 16. Following the dinner, a short meeting of the hospital

The Audrain County Medical Society meets in the new hospital wing.

staff was held. Mr. Moss, Administrator of the hospital, told the staff that plans for moving patients from the older part of the hospital to the new addition were complete and would be carried out either February 17 or 18. Some remodeling would then be done on the original part of the building. The new addition increases the bed capacity from 51 to 120.

On the adjournment of the staff session the meeting of the Audrain County Society was called to order. A few items of business were transacted and then the speaker for the evening was presented, namely, **E. H. Burford**, M.D., St. Louis. Dr. Burford gave a good, practical discussion on "Common Genito-Urinary Problems in General Practice and Their Treatment." Total attendance for the evening was eighteen including five guests.

Hospital staff and society meet together.

Kathryn C. Epple, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

The fourth session in a series of five evening postgraduate medical meetings was held at the University of Missouri, Thursday night, February 25. The meeting was sponsored jointly by the Medical School of the University and the Missouri Academy of General Practice. Physicians in the central part of the state are specificially invited to these meetings.

The program for February 25 was a symposium on "Fluid Balance" which was presented by Dr. **Roscoe L. Pullen**, Professor of Medicine and Dean; Dr. **Dallas K. Meyer**, Associate Professor of Physiology, and Dr. **Hugh E. Stephenson, Jr.**, Assistant Professor of Surgery.

J. L. Washburn, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society was held Thursday night, February 11, at Harrisonville. The scientific program for the evening was on "Orthopedics" and was presented by Dr. **Richard Kiene**, Kansas City.

O. B. Barger, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

A dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society and its Woman's Auxiliary was held in the Pine Room of the Greyhound Bus Station, Rolla, on Thursday night, February 25.

The program for the evening was sponsored by the Missouri Academy of General Practice, to wit: **Stanley Wald**, M.D., St. Louis, Department of Internal Medicine, Washington University Medical School, and **C. Alan McAfee**, M.D., St. Louis, Department of Surgery, Washington University Medical School, who discussed "The Management of Benign Diseases of the Large Bowel and Acute Pancreatitis." This interesting program was fully enjoyed by all.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

FRANK HALL, CAPE GIRARDEAU, COUNCILOR

Southeast Missouri Chapter of the Missouri Academy of General Practice

A meeting of the Southeast Missouri Chapter of the Missouri Academy of General Practice was held in the Staff Room of the St. Francis Hospital, Cape Girardeau, on Thursday night, February 25. All the members of the Cape Girardeau, Perry, SEMO and Mineral Area Societies were invited to this session.

An excellent program was presented in the form of a panel discussion with Dr. **Paul Murphy**, St. Louis, Chairman of the Tuberculosis Committee of M.S.M.A. acting as moderator. Members of the panel and their topics of discussion were as follows: **Herbert C. Sweet**, M.D., St. Louis, "Pulmonary Function," **Joseph L. Lucido**, M.D., St. Louis, "Recent Advances in Thoracic Surgery," **John Wyatt**, M.D., St. Louis, "Newer Concepts in Pulmonary Pathology," **William A. Werner**, M.D., St. Louis, "Recent Trends in the Therapy of Pulmonary Tuberculosis." All the members of the Missouri Academy of General Practice who attended this meeting are entitled to two hours of formal credit. Following each panel member's short discussion, the meeting was thrown open to questions and general discussion. Much interest on the part of the audience was exhibited in the presentation. A total of twenty-nine physicians were in attendance.

J. H. Trolinger, *Secretary,*
Southeast Missouri Chapter,
Missouri Academy of General Practice

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News From the Medical Schools

Washington University

Lectures: The fifth annual Major G. Seelig Lecture was delivered February 17 at the Washington University School of Medicine by Dr. Frederick A. Coller, professor and head of the department of surgery at the University of Michigan School of Medicine, on "A Review of the Development of the Surgical Treatment of Cancer of the Colon and Rectum." The lectureship was established in 1948 in honor of the late Dr. Major G. Seelig, professor emeritus of clinical surgery at the School of Medicine.

New Addition: Dr. Harvey A. Humphrey, previously radiologist at Children's Hospital, Los Angeles, has joined the School of Medicine faculty as assistant professor of radiology in charge of pediatric roentgenology in the Edward Mallinckrodt Institute of Radiology.

Visitors: Representatives from India, Chile, Pakistan, Sweden and Japan, recent visitors to the School of Medicine, were Dr. Shanker K. Menon, dean of the faculty of medicine, University of Rajputana, near Delhi; Dr. A. Garretón Silva, dean of the faculty of medicine, University of Chile, Santiago; Dr. Aziz Khan, director of the Cancer Research Institute and surgeon at Dow Medical College, Karachi, Pakistan, with Mrs. Khan, a medical social worker, sent by the U. S. Department of State for cancer research orientation; Ali Berggren, Sweden, who, after a study commissioned by the King of Sweden, correlated his findings on problems and methods of dealing with aging in the U. S. with Dr. E. V. Cowdry, research professor of anatomy and director of the Wernse Laboratory of Cancer Research; and for surgery observation, particularly in plastic and chest surgery, Dr. G. Shiokawa, chief surgeon at Taketa Hospital, Aizuwakamatzu, Japan.

St. Louis University

Faculty: Pathology professor, Dr. Henry Pinkerton, addressed the St. Louis Medical Society on "Virus Research." In March, he spoke on the same subject at Walter Reed Hospital, Washington. Orthopedic Surgery Instructor Otokar Machek has been appointed as full time in the department of rehabilitation at the St. Mary's Group. Associate professor of medicine Raymond O. Muether was installed as president of the St. Louis Medical Society. Assistant professor of clinical medicine was installed as president-elect. Assistant professor of internal medicine, Edward P. Buddy, received the Knighthood of St. Gregory for meritorius service to the Church from Archbishop Joseph E. Ritter. Assistant in surgery, Rubin Hackmeyer, elected president of the staff at Alexian Brothers Hospital. C. Rollins Hanlon, Professor of Surgery, elected president of the St. Louis Surgical Society. Instructor in neuropsychiatry, S. R. Banet, elected president of the staff of St. Vincent's Hospital.

Front Office: Paul C. Reinert, S.J., President, discussed current plans for the University and showed the film, "The St. Louis University Story" at the faculty seminar of the St. Louis University School of Medicine.

University of Missouri

New Course: The University of Missouri will offer in the fall of 1954 a new course on medical writing for laymen interested in scientific publications, medical advertising and the like. This course will be offered through the School of Journalism with classes in Principles of Anatomy, Physiology, Biochemistry and Pharmacology in the School of Medicine.

Graduation: Capping exercises for the Department of Nursing Education were reinstituted on the campus on January 24, after a lapse of several years.

Visitors: Dr. P. Grabar of the Pasteur Institute, Paris, France, addressed the faculty and student body on February 2 on the title, "Immunological Methods in Protein Chemistry."

Lecture: Dr. Hans Schlumberger, Professor of Pathology, Ohio State University College of Medicine, addressed the faculty and the student body on Monday, January 24, on the topic, "The Effects of Irradiation in the Rhesus Monkey."

HEALTH EDUCATION WORKSHOP

Central Missouri State College and the Missouri Division of Health will jointly sponsor a second Health Education Workshop at Warrensburg, July 6 to 8, 1954.

The theme is "Cooperative Planning for Better Health for School-Age Children." Participants will include parents, school administrators, classroom teachers, nurses, physicians, dentists, other health workers and representatives of other community agencies.

The following persons met in Jefferson City on December 17 to develop plans for the workshop: Freda K. Parks, R.N., Pediatric Nursing Consultant, Missouri Division of Health, Jefferson City; Dr. Wm. F. Knox, Director of Public Service, Central Missouri State College, Warrensburg; Mrs. Laura Alice Lee, R.N., College Nurse, Central Missouri State College, Warrensburg; W. Donald Stewart, Cass County Superintendent of Schools, Harrisonville; J. M. Wilson, Cole County Superintendent of Schools, Jefferson City; H. W. Schooling, Superintendent of Schools, North Kansas City, and President Missouri Association of School Administrators; George E. Mowrer, Director, Guidance Services, State Department of Education, Jefferson City; Ray McIntyre, Field Secretary, Missouri State Medical Association, St. Louis; Dr. John J. Sennott, Pediatrician, Jefferson City, Public Relations Committee, Cole County Medical Society and Member, Infant Care Committee, Missouri State Medical Association; Mrs. Emily L. Beigel, R.N., Chairman, Department of School Nurses, Missouri State Teachers Association, and School Nurse, North Kansas City; Walter R. Lalor, M.P.H., Health Education Consultant, Missouri Tuberculosis Association, Jefferson City; Orus Wilson, Director of Education, Missouri Cancer Society, Jefferson City, and Mrs. J. O. Helm, New Florence, Health Chairman, Missouri Congress of Parents and Teachers.

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You know the "don'ts" of sodium restriction—the list is long. Here are some "do's" that will add zest to your patient's diet. And with new flavors to replace salt, he'll have a diet he can stick to.

Here's what can be used—

Spices and herbs, lemon and lime, variously flavored vinegars are all acceptable. And fresh-ground pepper has a pungency that never came out of a shaker!

Here's how—

Hamburger takes well to a pinch of thyme, another of marjoram, and a sprinkle of pepper. Chicken's delicious with a squeeze of lemon, a touch of rosemary, and sweet butter to baste. And broiled steak speaks for itself.

Vegetables are even easier. Your patient may like them livened with vinegar—white wine vinegar with mild flavored vegetables, red with more robust flavors. Broccoli and asparagus are especially good with lemon juice.

If butter is a "must," make it sweet butter with nutmeg or rosemary on string beans. Savory brings out the best in limas, while tarragon teams with carrots, basil with tomatoes. And onions boiled with whole clove and thyme would delight the taste of an epicure!

This is only the beginning, but it gives your patient something to start with. Before long he'll want to experiment for himself. And while he's learning new flavor tricks, your treatment has a chance to show its full effectiveness.

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*Average of American beers

Two Sides Presented

The Inept A.M.A.

(Editorial, *Kansas City Star,* Feb. 6)

We like doctors. We are very much against socialized medicine, just as they are. For the devotion to research and the great progress in medicine and extending the life span, we can't pay high enough tribute. But, frankly, we can't refrain from remarking that the American Medical Association has about the most stupid and impossible public relations imaginable. It probably isn't intended. But whoever is setting up as a spokesman, supposedly for the doctors of the nation, is certainly inept, to put it in the most charitable fashion.

The public is getting the impression the A.M.A. is against almost everything under the sun. We don't believe doctors, as a rule, feel that way at all. Just recently the A.M.A. has taken on the veterans' organizations by campaigning against admittance to government hospitals of veterans with nonservice connected disabilities. It is feared this might open the door to socialized medicine. We are not quarreling so much with the soundness of the protest as the general effect flowing from it.

Most of the veterans' groups are sore as a boil at the A.M.A. and all needlessly. If there is an abuse it's one in which the veterans' groups should be consulted, with the Veterans Administration itself leading the cleanup if there is to be one.

President Eisenhower has even more recently put before the country a broad program extending not only social security but the health activities of the government to reach more millions. It explicitly emphasizes that it stops short of socialized medicine and that completely. It entails more government aid for hospitals and clinics, possible government reinsurance of private group hospitalization plans, especially those on the border line, to include the more needy.

The acclaim with which the A.M.A. spokesman received this program was so silent as to be almost vociferous in its implication. Even friendly members of Congress are asking just where the A.M.A. stands on this general welfare program and if it really represents the thinking of the average doctor. We don't believe it does. The height of absurdity has almost been reached when it has been suggested the A.M.A. favored the Bricker amendment to the Constitution, because the door might be opened to socialized medicine by some international agreement flowing from the United Nations. Or maybe the A.M.A. reached its "agin" peak when it opposed federal aid to medical schools and that when this country is in desperate need of doctors.

The sure and certain way to get socialized medicine is for the vocal leadership of the medical profession to become chronic "aginers." Just being against something doesn't stop it. We are going to progress in medicine and care of the people's health one way or another. It can and should be done short of socialized medicine and within the bounds of our private enterprise system. Doctors should take the lead. If it doesn't come that way, we will have socialized medicine sure as fate. The whisky and brewery interests opposed everything until we got the experiment in prohibition. Big business used to see a bogeyman behind every move that represented progress until big business itself became the whipping boy of the politician and the demagogue. Business began to show sense. The bigger the business usually the harder the work on the problem of public relations now. It has changed the climate.

We are ready to believe that the impression being left by the A.M.A. spokesman comes from inexperience in the field of public relations more than intent. But there should be a quick shift from "agin everything" to lifting the banner high and spearheading the drive for carrying better health programs to more millions with the A.M.A. taking the lead. That's the way to stop socialized medicine. And we believe this reflects the real opinion of the great majority of our fine folks of medicine.

A.M.A. Not Just "Agin" Its President Says

(*Kansas City Star*, Feb. 12)

The American Medical Association has been under attack for many years by the proponents of government medicine. This attack has centered on two points: (1) that the A.M.A. does not represent the true thinking of the rank and file doctors and (2) that the A.M.A. is a "standpat" organization which is "agin" all health progress. Both of these charges are false, but both were repeated in a *Kansas City Star* editorial on February 6.

Let me emphasize that the A.M.A. is a democratic organization. Its policies are decided by majority vote of a 190 man house of delegates, representing every state in the union and all the specialties and general practice. Missouri doctors not only are represented in this house, but have a member serving on the A.M.A. board of trustees. In support of the second point the *Kansas City Star* characterized as "needless" the A.M.A.'s stand against the admittance of nonservice connected cases to veterans hospitals. Particularly, it said this stand shouldn't have been taken without consultation, with the VA and veterans' groups. The truth is that the A.M.A. has been meeting with these groups for over twenty years without solution of the problem. The veterans groups want more and more hospitals for veterans.

Doctors feel that sufficient VA hospitals have been constructed to care for all service-connected cases and see no reason why American taxpayers should finance the medical care of veterans whose illness has absolutely no connection with service. According to the VA's own figures, such cases now total 65 per cent of the daily patient load in VA hospitals.

FOR ALL THE PEOPLE

Doctors are not against veterans; they are for all the people. We believe tax funds should be used to help build community hospitals, chronic disease centers and other medical facilities open to all the citizens of a community, including veterans. This is what President Eisenhower has proposed and we strongly endorse it. This stand does not make the A.M.A. popular with veterans groups, but we believe it has the support of the majority of citizens and will result in better care for all in the long run.

The editorial also criticized the A.M.A. for its supposed silence regarding President Eisenhower's health program. This is what the A.M.A. said in a nation-wide press release on January 24:

"The board is pleased to find so many of the ideas and principles for which the A.M.A. has stood for so many years. The board endorses the general objectives of the President to extend needed facilities, to promote further research, to increase coverage under voluntary health insurance and to rehabilitate the disabled."

The A.M.A. has reserved judgment on the proposal for federal reinsurance of voluntary health insurance because to date this is just a vague idea. No specific bill has been presented. There is also serious question in the private insurance industry as to whether any such program is necessary since companies already reinsure each other.

ON HEALTH DEDUCTIONS

The A.M.A. has, however, taken a strong stand in favor of allowing all medical bills, including health insurance premiums, to be deducted from taxable income. This would require no additional federal bureaucracy, and would help those who need help most—the people who have suffered a serious illness or injury within a given year.

The A.M.A. supports the principle of the Bricker amendment because there are at the present time several international agreements under study by the State department which would institute government medicine. These could be adopted by a two-thirds vote of the senators who happened to be sitting in the Senate chamber at any time and would supersede all previous decisions to the contrary. We favor an amendment which would insist that any treaty or executive agreement involving domestic law must be passed by both houses of Congress, as all our internal laws now are passed.

In a blanket manner, the editorial criticized the A.M.A.'s stand on federal aid to medical schools, implying A.M.A. was against training more doctors. The association is strongly in favor of expansion of our medical schools, and has demonstrated so repeatedly. The only question is how this can best be done.

AGAINST SCHOOL SUBSIDIES

A.M.A. has opposed yearly subsidies to medical schools because of the danger of federal control of education. It has, however, supported one-time federal grants for the construction of medical school facilities, a proposal similar in nature to the Hill-Burton hospital construction act, which the A.M.A. has always endorsed. The American Medical Association is spending thousands of dollars annually through its council on medical education and hospitals to encourage the improvement and expansion of medical schools. In addition, it has established a nonprofit foundation to raise money for medical schools which has contributed $2,830,000 in the last four years.

The editorial seemed to imply that doctors public relations would be better if we were never "agin" anything. We do not believe our responsibility is to pose as Pollyannas. We believe our responsibility is to be honest with the people. This means pointing out dangers and opposing unsound measures as well as pushing many projects for improvement in the health field. While we say "bravo" many times, it is necessary to say "no" in a very definite manner on occasion. After all, seven out of the Ten Commandments begin with "Thou shalt not . . ."

We agree with *The Kansas City Star* that the A.M.A. should lift the banner high and spearhead the drive to carry better health to more millions. That is our aim. However, in the constant bombardment under which we have been working, it is often necessary to shore up our fortifications as well as lead the attack. Our job would be easier if we doctors were not subjected to the kind of uninformed heckling which appeared in *The Kansas City Star* editorial.

Edward J. McCormick, M.D.
President, American Medical Association.

MISSOURI STATE MEDICAL ASSOCIATION

The 96th Annual Session of the Missouri State Medical Association will be held in the Jefferson Hotel, St. Louis, April 4, 5, 6 and 7, 1954.

SCIENTIFIC PROGRAM

Monday, April 5, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Present Status of Cardiac Arrest and Resuscitation, Hugh E. Stephenson, Jr., M.D., Columbia.

Regardless of the type of patients one sees in his practice, sooner or later the physician will be faced with the necessity to resuscitate an acutely arrested heart. Unless one is aware of the pitfalls, precautions and complications likely to be encountered, this golden opportunity may be lost. This discussion will attempt to bring to attention the factors necessary for successful resuscitation . . . as well as a brief review of the present status of cardiac arrest from an etiologic and preventive aspect.

9:20 a.m. Discussion: C. Rollins Hanlon, M.D., St. Louis.
R. A. Ritter, M.D., Cape Girardeau.

9:30 a.m. Intervertebral Disks, George E. Roulhac, M.D.; J. Albert Key, M.D., and A. B. Jones, M.D., St. Louis, Panelists.
Moderator: Ralph A. Kinsella, M.D., St. Louis.

10:00 a.m. Intermission to View Exhibits.

Section on Medicine, Crystal Room, Hotel Jefferson

10:30 a.m. Renal Complications in Diabetes, Max Miller, M.D., Cleveland.

In 1936 Kimmelstiel and Wilson first described a distinctive lesion of the renal glomeruli which they associated with a clinical syndrome of diabetes, hypertension, and a nephrotic syndrome. Since then the work has been confirmed by many investigators, the majority agreeing upon the specificity of the lesion. In recent years, careful studies have shown that the lesion is really the result of profound focal thickening and hyalinization of the capillary loops, or their basement membranes. The name "intercapillary," therefore, is a misnomer. The glomerular lesions are of two distinct types, nodular and diffuse. The nodular hyaline lesion is a spherical shape and occupies the center of a glomerular lobule, varying in diameter from 20 to more than 100 microns. The second lesion consists of focal fibrosis of the majority of glomeruli without spherical hyaline masses.

The nodular lesions are almost pathognomonic of diabetes, according to Bell and Laipply. The latter has also emphasized the specificity of glomerular focal fibrosis for the diagnosis of diabetes pathologically. The focal fibrosis is present in nearly all the glomeruli in approximately equal degree in diabetes, as contrasted with the variation in degree and the presence of many normal glomeruli in nephrosclerosis, pyelonephritis and glomerulonephritis. These lesions occur in from 30 to 60 per cent of diabetic subjects, predominantly in the older age group. Except for the study of Horn and Smetana all writers are agreed that it is present only rarely in other conditions.

Since the number of patients who have had diabetes fifteen years or longer is constantly increasing, particularly in the younger group, it is certain that this renal complication will take its place with cardiovascular disease as a major cause of death in diabetes.

Other types of renal lesions which frequently complicate diabetes will be discussed also.

11:00 a.m. The Diagnosis of Pancreatic Disease, R. O. Muether, M.D., St. Louis.

11:20 a.m. Discussion: Wilson J. Ferguson, M.D., Sikeston.
Harry L. Greene, Hannibal.

11:30 a.m. Subacute Bacterial Endocarditis, Earl L. Loyd, M.D., Jefferson City.

This paper will discuss in some detail the etiology and the pathology of subacute bacterial endocarditis as well as the clinical and laboratory features of the disease. The basic understanding of this condition is essential for proper application of current therapeutic methods. The paper will include a discussion on the use of combinations of various antibiotic drugs and will make comments on the reasons for treatment failures. Mention will also be made of prophylactic measures in the prevention of subacute bacterial endocarditis.

11:50 a.m. Discussion: Joseph C. Edwards, M.D., St. Louis.
John J. Hammond, M.D., St. Louis.

Section on Obstetrics, Gold Room, Hotel Jefferson

10:30 a.m. Toxemias of Pregnancy, Conrad S. Collins, M.D., New Orleans.

The utilization of tracheotomy in many medical and neurologic conditions and its value in these states has been well defined. As many patients with eclampsia succumb to cerebral lesions, it was decided to utilize tracheotomy in those cases failing to respond to the usual regimen or who showed marked obstruction of the tracheobronchial tree. The results achieved in approximately twenty-eight cases is presented.

11:00 a.m. Committee on Maternal Welfare Report, H. C. Wasserman, M.D., St. Louis.

11:20 a.m. Discussion: Matthew W. Weis, M.D., St. Louis.
James E. Keeler, M.D., Kansas City.

11:30 a.m. Bleeding States of Pregnancy Associated With Placental Abnormalities, Harold L. Gainey, M.D., and Kenneth S. Nicolay, M.D., Kansas City.

In this discussion, emphasis will be placed upon the placental anomaly of circumvallation of the placenta, and the placental accident, rupture of the marginal sinus, in an attempt to establish a clinical differentiation in the symptomatology, so that the management of these problems may be differentiated from placenta previa and abruption of the placenta.

11:50 a.m. Discussion: George Wulff, Jr., M.D., St. Louis.
Joseph L. Johnston, M.D., Springfield.

"...use a little wine for thy stomach's sake and thine often infirmities..."

—Paul

The use of wine in nutrition and in medicine dates back to the beginning of history. It is recorded in the ancient Egyptian papyri, in the Bible—as in the oft-quoted admonition from Paul to Timothy—and in epicurean and medical annals from Hippocrates down to our own times.

In recent years there has developed a demand within the medical profession that the true values of wine be determined, and that fact be separated from folklore. Accordingly, fifteen years ago, research projects in many American medical centers were initiated to determine by modern scientific techniques the food values and medical uses of wine.*

The investigations have brought forth evidence which may be of interest and practical value . . .

. . . Wine stimulates the appetite in anorexia, and gently increases gastric secretion.

. . . Wine serves as a quick-energy food. Its small amount of hexose is speedily absorbed, and its moderate content of alcohol is metabolized readily, even by diabetics. Its B-vitamins and absorbable iron make it a useful supplementary source of these substances.

. . . Wine possesses significant diuretic, vasodilating and relaxing properties. The gentle sedation provided by a small amount of wine at bedtime is a pleasant aid in inducing restful sleep.

. . . A little wine before or with the meal can offer a needed element of "graceful living" to the patient . . . it can help in the psychological care of the elderly and the convalescent.

In California (and in other regions, too) a combination of soils, climates and modern wine-making skills makes it possible to grow the world's finest wine grapes of every variety, and to produce wine of strict quality standards, true to type, moderate in price.

*Research information on wine is available upon request.

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12:00 noon. Round Table Luncheon, Gold Room, Hotel Jefferson.
Presiding: Daniel L. Sexton, M.D., St. Louis.

General Session, Crystal Room, Hotel Jefferson

1:30 p.m. Motion pictures.

2:00 p.m. Problems in Gallbladder Surgery, Alfred M. Large, M.D., Detroit.
What is the proper treatment for "silent gallstones?"
When should operation be performed for acute cholecystitis?
What are the indications for common bile duct exploration?

An attempt will be made to answer these and certain other questions that frequently arise in the every day management of patients with biliary tract disease.

2:30 p.m. Factors Conditioning the Response of Pneumococcic Pneumonia to Antibiotic Agents, Thomas A. Van Metre, M.D., St. Louis.

2:50 p.m. Discussion: John W. Berry, M.D., St. Louis.
John C. Tinsley, Jr., M.D., Columbia.

3:00 p.m. The Use of Antibiotics in Surgery, W. A. Altemeier, M.D., Cincinnati.

3:30 p.m. Intermission to View Exhibits.

4:00 p.m. House of Delegates.

Tuesday, April 6, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Value of the Smear Technic in the Early Diagnosis of Cancer of the Cervix, Ferdinand C. Helwig, M.D., Kansas City.

The results of more than 2,000 smears for the early detection of cancer of the cervix, obtained from the office of one gynecologist, will be presented. The follow-up by around-the-clock biopsy or cone, often with step or even serial section studies, of the cases with positive smears will be discussed. The stages of hyperestrogenic stimulation, basal cell atypia, *in situ* carcinoma, gland penetration and early stromal invasion will also be outlined. Prognosis in nonclinical cervical cancer as compared with clinical cancer will be brought out. The discussion will be illustrated by the use of colored slides of the normal and pathologic histology and cytology of the uterine cervix.

9:20 a.m. Discussion: J. Milton Singleton, M.D., Kansas City.
Kenneth S. Nicolay, M.D., Kansas City.

9:30 a.m. Studies of Estrogen Therapy in Pregnancy, M. Edward Davis, M.D., Chicago.

10:00 a.m. Intermission to View Exhibits.

Section on Pediatrics, Crystal Room, Hotel Jefferson

10:30 a.m. Febrile Convulsions in Childhood, Gilbert B. Forbes, M.D., Rochester, New York.

The subject of febrile convulsions should be of interest to both general practitioners and pediatricians. The febrile convulsion is the most common neurologic disorder seen in infancy and childhood; parents are alarmed at the occurrence of this violent and frightening chain of events; the physician is concerned with matters of differential diagnosis at the bedside; and all parties concerned must face the question of both immediate and eventual prognosis.

It is proposed to discuss this subject from these points of view and, in addition, to mention those situations in which febrile convulsons are most likely to occur. The age incidence of this "disorder" is of considerable interest. Ideas concerning provocative factors and pathogenesis will be presented and discussed.

11:00 a.m. The Treatment of Purulent Meningitis, John C. Herweg, M.D., St. Louis.

11:20 a.m. Discussion: Eugene J. Schwartz, M.D., Springfield.
Edward Lee Washington, M.D., Columbia.

11:30 a.m. Malignant Tumors in Infancy and Childhood, James P. King, M.D., St. Louis.

This is a discussion of the increasing importance of malignant tumors in infancy and childhood. It will point out the common varieties of tumors that occur in this age group and their presenting clinical pictures.

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Stress will be placed on the diagnostic handling of masses in children. It will include a brief discussion of the chemotherapeutic agents available for the therapy of disseminated malignancies which extend beyond the realms of radiotherapy and surgery, such as the nitrogen mustards, ACTH, cortisone, folic acid antagonists, and 6-mercaptopurine.

11:50 a.m. Discussion: Charles Eckert, M.D., St. Louis.
Durward G. Hall, M.D., Springfield.

Section on Surgery, Gold Room, Hotel Jefferson

10:30 a.m. Diverticulitis, Rudolf J. Noer, M.D., Louisville.

Diverticulosis is variously reported as present in from 5 to 25 per cent of all individuals over 40. The mere presence of colonic diverticulosis is of no great significance. It is only when the diverticuli become inflamed that the patient is subject to the hazards of the complications of diverticulitis.

The most frequent complications are perforation with abscess formation or peritonitis, obstruction and hemorrhage. The hazard to life from perforation of an inflamed diverticulum is greater than many have believed in the past. Medical measures may help in the early stages of the disease, but the truly life-saving value of a proximal colostomy must not be too long delayed. Diversion of the fecal stream will minimize the hazard of perforation and fistula formation. Obstruction not infrequently develops following repeated attacks of acute diverticulitis due to fibrosis of the colonic wall. This obstruction is in itself frequently severe enough to require operative relief. The x-ray appearance may suggest the possibility of malignancy which increases the need for exploration. A resection, of a type proper for carcinoma, should be carried out; nothing will have been lost if histologic studies eventually reveal only diverticulitis and peridiverticulitis, but much is lost if an inadequate resection is carried out when carcinoma is present.

Hemorrhage is a much more frequent complication of diverticulitis than was once believed. During the last year two cases of exsanguinating hemorrhage from diverticulitis, required colonic resection for relief.

Finally, the problem of the patient with repeated incapacitating diverticulitis from a relatively small area of colonic involvement must be considered. The hazard of the complications of diverticulitis is sufficiently great and the attacks sufficiently incapacitating that one should not hesitate to resect the involved area if the balance of the colon remains relatively free, thereby saving the patient the hazard of future complications and assuring him of a much more normal existence.

11:00 a.m. Scars, Prevention and Treatment, David W. Robinson, M.D., Kansas City.

Scars, post-traumatic and postoperative, which, to the laymen, are the visual evidence of the surgeon's skill and which, too often to the surgeon, are quite incidental to his accomplishments in the all important "deep dangerous areas," can be minimized by the surgeon's basic knowledge of wound healing and his careful attention to technical detail. Blood supply of the part, infection, foreign bodies, rest and tissue tension are the essential factors in the locale of the wounds effecting fibrosis but systemic influences relating to age, endocrine balances, race, inheritance and diet are important.

With such knowledge in mind, technical points can be emphasized, e.g., wound toilet, removal of foreign bodies, debridement, minimal use of fine sutures and ligatures, drains, dressings and splints, avoidance of dead space, closure in lines of normal skin tension, time of motion, antibiotics and systemically adequate diet, especially protein and caloric intake, vitamins, fluid, mineral and electrolyte balance. Wounds should be closed carefully layer by layer and known points on the skin should be approximated to avoid "getting lost." A fine subcutaneous or dermal closure will take the tension of the surface skin closure and leave a fine scar.

The removal of scars is never complete but can be quite good by excision and closure. Wherever possible, local adjacent tissue, being of the type desired, gives the best cosmetic results and should be utilized by undermining and shifting. Suture lines should fall into the normal lines of skin tension and should not cross crease lines at right angles. Sometimes a wide defect is best closed by a skin graft, usually the thicker the better. A pedicle flap shift from a distance is usually unnecessary unless much bulk is required or it is necessary to cover vital deeper structures. Hypertrophic scars and keloids should be operated upon only in a stage of resolution so as not to add more scar. Radiation therapy within a few days after surgery may be helpful.

50 *and seven*

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Ralph Emerson Duncan, M.D., Medical Director.

11:20 a.m. Discussion: Herman Neuman, M.D., St. Louis.
James F. Dowd, M.D., St. Louis.

11:30 a.m. Traffic Accidents, Jacob Kulowski, M.D., St. Joseph.

The human ingredients of traffic accidents are well known and have been told almost to the exclusion of what may be termed the inhuman elements involved in traffic injuries and deaths. This discussion will cover some of the most important inhuman or physical factors which contribute to the mounting death toll and injuries on the highways—the death and injury potentials of the car itself will be scrutinized. It is hoped that criticism will yield to some extent at least recommendations which will alleviate this distressing situation.

11:50 a.m. Discussion: Oscar P. Hampton, M.D., St. Louis.
M. David Orrahood, M.D., St. Louis.

12:00 noon. Round Table Luncheon, Gold Room, Hotel Jefferson.
Presiding: Paul O. Hagemann, M.D., St. Louis.

Wet Clinic, Desloge Auditorium, St. Louis University School of Medicine

Presiding: R. O. Muether, M.D., St. Louis.

2:45 p.m. Collagen Disease, Philip A. Tumulty, M.D., St. Louis.

3:30 p.m. Infectious Hepatitis, James W. Colbert, M.D., St. Louis.

4:15 p.m. Peripheral Arterial Disease, Charles R. Doyle, M.D., St. Louis.

Wet Clinic, Wohl Auditorium, Washington University School of Medicine

Presiding: A. N. Arneson, M.D., St. Louis.

2:45 p.m. Chronic Ulcerative Disease of the Lower Extremity, Carl A. Moyer, M.D., St. Louis.

3:30 p.m. The Medical Treatment of Hypertension, Henry A. Schroeder, M.D., St. Louis.

4:15 p.m. Results of Therapy With Radio-active Colloidal Gold in Pelvic Carcinoma, Alfred I. Sherman, M.D., St. Louis.

Wednesday, April 7, Crystal Room, Hotel Jefferson

8:00 a.m. Motion pictures.

9:00 a.m. The Estimation of Healing of the Acute Rheumatic State, Graham Asher, M.D., Kansas City.

With the development of more effective means of treating the rheumatic patient has come the need of more accurate estimations of the stage of, or completion of, healing. Methods to permit finer judgment in this matter also arise from the large number of cases which are accurately diagnosed at an earlier and more remediable state. The promise of the clinical applications is a lessening of the psychic and economic strain on the family and better evaluation of the various methods of therapy and the earlier recognition of the healed quiescent state and, above all, the recognition of residuae which lead to insidious involvement of the heart or to manifest relapse.

The demonstration of significant mediastinitis and mediastinal adenitis by fluoroscopy and oblique x-rays will be shown in lantern slides and the degree of pathology suggested will be correlated with the clinical and laboratory findings in relation to the state of healing and the relative value of this useful and relatively precise method demonstrated.

9:20 a.m. Discussion: Robert J. Glaser, M.D., St. Louis.
Don C. Weir, M.D., St. Louis.

9:30 a.m. Endocrine Problems of Childhood, Henry H. Turner, M.D., Oklahoma City.

The endocrine problems of childhood are mostly concerned with growth and development involving the skeletal, reproductive and nervous systems. Normal maturation of the human organism involves many complex processes, including endocrine, nutritional and certain extrinsic factors, functioning in normal physiologic balance.

Among the non-endocrine causes of variations in growth and development are those due to: (1) inherent or constitutional factors, (2) congenital deformities, (3) anomalies of the circulatory and renal systems, (4) chronic infectious diseases, and (5) nutritional disturbances.

Those of endocrine origin include hormonal imbalance of: (1) pituitary and hypothalamus, (2) thyroid, (3) adrenals, (4) gonads, (5) parathyroids and (6) pancreas.

The differentiation of true abnormal endocrine states from conditions derived from congenital and genetic defects, which may simulate them, is often difficult and requires patience and diagnostic skill on the part of the physician. A careful and complete history is imperative and may elicit heredio-familial tendencies toward tallness or shortness, obesity or thinness, early or late puberty, or inherited genetic mutations such as hypertelorism and dyschondroplasia. Though little may be done for many of the non-endocrine types, effective hormonal therapy is available for the majority of patients with endocrine dyscrasias.

Slides of clinical cases illustrating the cardinal features of developmental changes of non-endocrine and endocrine origin in childhood will be presented. Pertinent diagnostic aids and methods of treatment will be discussed.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. The Present Status of Care of Poliomyelitis, John C. MacQueen, M.D., Iowa City.

The majority of patients with acute poliomyelitis have been cared for in polio centers. This has resulted in much of the information concerning the

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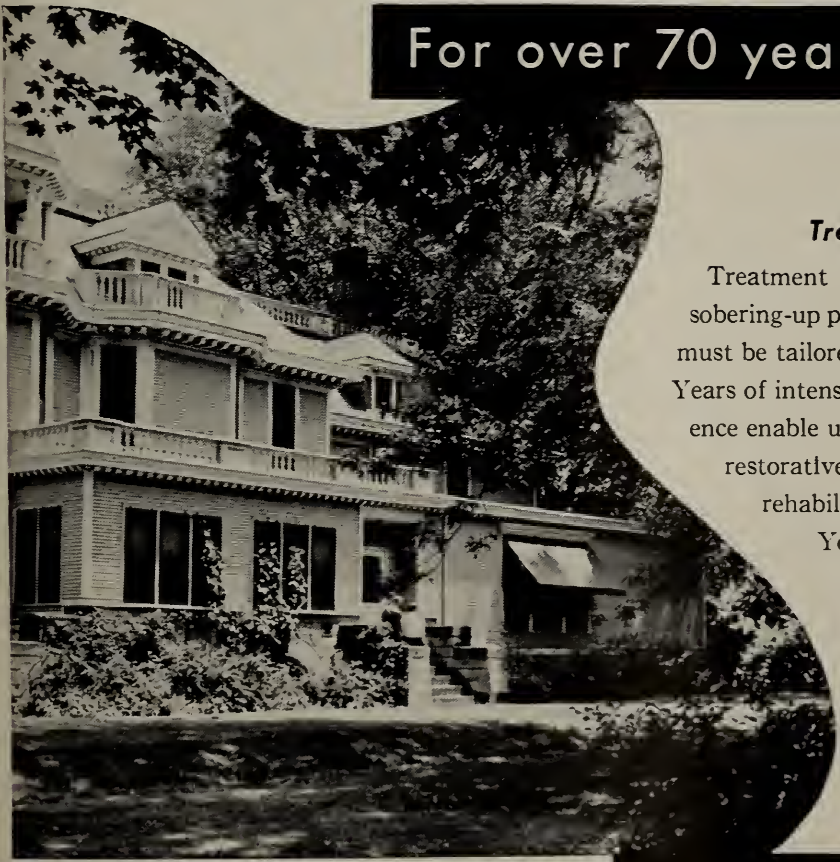

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clinical course of the disease being known primarily to personnel working in centers of care. With the present emphasis on home care, it becomes desirable that this information become more widely known.

Information is presented concerning the effect of physical activity during the acute phase of the disease on the severity of the paralysis; correlating the use of immunizing procedures to the localization of paralysis; concerning the clinical course of the patient with acute bulbar poliomyelitis; evaluating the proper use of the lumbar puncture.

These and other clinical topics of diagnostic and prognostic interest are presented.

A clinical summary of 402 children with acute poliomyelitis is a source of the data presented.

11:00 a.m. Problems in Blood Preservation, J. Garrott Allen, M.D., Chicago.

11:30 a.m. The Differential Diagnosis of Psychogenic Symptoms, Don P. Morris, M.D., Champaign, Ill.

The first step in diagnosing a symptom as psychogenic (i.e. from primary emotional or environmental causes) is the positive establishment of conflict and stress situations by a careful history. These situations must meet certain definitive criteria: They must be subjectively and individually meaningful and important to the patient; their objective validity is of secondary importance. To be potent etiologic factors they must not be compensated for and not resolved at the time of the onset of the symptom. They must be logically related to the symptom, either by concurrence in time, especially if this is repeated, or by location of the symptom (e.g. voice symptoms in singers or preachers), or by proximity of another person important in the patient's conflict.

More conclusive evidence is obtained from the removal of the symptom by psychotherapeutic methods: thus final opinion on diagnosis must often be withheld and treatment initiated on the basis of a highly probable theory rather than on the basis of proven fact. This may be referred to as "exploratory psychotherapy" and occupies the same relative position in medicine as any other therapeutic trial.

Organic etiologies should be ruled out as rapidly and as completely as possible, but such exclusion should never be the sole basis of concluding that psychogenic factors are responsible. In many patients, however, the fact that one organic etiology has been established by no means indicates that the total picture is to be explained on this basis. Some symptoms may be caused by this and others by emotional difficulties, either primary or secondary to another disease. In such cases simultaneous treatment by several methods is clearly indicated.

1:30 p.m. House of Delegates.

TIME AND PLACE OF MEETINGS

Sunday, April 4

9:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
10:30 a.m. House of Delegates, Crystal Room, Hotel Jefferson.
1:00 p.m. Intermission for lunch.
2:00 p.m. House of Delegates, Crystal Room.
3:30 p.m. Reference Committee meetings scheduled hourly.

Monday, April 5

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Sections, Crystal and Gold Rooms.
12:00 noon. Round Table Luncheon, Gold Room.
1:30 p.m. Motion pictures, Crystal Room.
2:00 p.m. Scientific Session, Crystal Room.
3:30 p.m. Intermission to View Exhibits.
4:00 p.m. House of Delegates, Crystal Room.
6:00 p.m. Fraternity and Alumni dinners and meetings.

Tuesday, April 6

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion Pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Sections, Crystal and Gold Rooms.

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12:00 noon. Round Table Luncheon, Gold Room.
2:45 p.m. Wet Clinics, Washington University School of Medicine and St. Louis University School of Medicine.
7:30 p.m. Annual Banquet, Gold Room. Rev. Paul C. Reinert, S.J., President, St. Louis University, Speaker.

Wednesday, April 7

8:00 a.m. Registration, Mezzanine Floor, Hotel Jefferson.
8:00 a.m. Motion pictures, Crystal Room.
9:00 a.m. Scientific Session, Crystal Room.
10:00 a.m. Intermission to View Exhibits.
10:30 a.m. Scientific Session, Crystal Room.
12:00 noon. Intermission to View Exhibits and lunch.
1:30 p.m. House of Delegates, Crystal Room.

Letter to Missouri Medicine

MORE COUNTRY DOCTORS

To the Editor:

Let not the young doctor imagine that his rural home and workshop will be located in a small town. Nearly every county has one or more large towns (2,000 or more inhabitants). His social and church affiliations will be good and his professional workshop satisfactory. Why not have the wife—or some trained nurse—become the office assistant? This plan seems to be successful everywhere. The assistant may, of course, be a trained laboratory technician, or one that can be trained to do the many simple tests that modern medicine demands. For more elaborate tests the nearby hospital—or the State laboratory—are serviceable.

But we need country doctors, and the State University proposes to train rural practitioners. Here are the offerings:

"The training of doctors on the campus at Columbia would be more conducive to their settlement in rural areas where they are needed most." (Statement of the special committee of the Board of Curators.)

"A medical school located in central Missouri at Columbia with lower living costs would be more likely to entice boys and girls from rural Missouri to choose medicine than would a medical school located in some metropolitan center."

We do expect the medical school at Columbia to encourage boys from the rural area to study medicine, but that is not enough. The state should help the superior boys who want to be doctors and are qualified to enter a medical school, in a financial way.

The State of Mississippi has given us a successful and practicable plan to accomplish an improvement in rural practice—the State provides the money to help the country boy to realize his ambition. (See *Look Magazine,* Nov. 17, 1953). Under the heading "Mississippi Trains Its Own Country Doctors," J. C. Furnor has written a fine article that will have a profound influence on the practice of medicine elsewhere. No wonder that Dr. Felix J. Underwood received a Lasker award for expanding the public health service of Mississippi. Our own State Health Department, no doubt, will profit by the experience of Mississippi, which soon will be the leading state in providing one doctor—not hospitals necessarily—for every 1,200 population in rural areas. Get out the superior country boys, help them to study medicine.

I for one feel that our universities forget to inculcate the principles of hard work—not amusements! Let the country boy receive his social training in the preparatory three or four years, then he should learn to study—a life's work as Dr. Osler taught us years ago. The college course and the medical training are the beginning only.

I was interested in the statement of Dr. Alan Gregg, Director of the Medical Science for the Rockefeller Foundation:

"Missouri for a long time will need doctors accustomed to and contented with life in the smaller towns. Large cities set before medical students three attractions of city practices, of early specializing, of migration to the still larger cities and of something nearer to commercialism than can survive the test of rural practice."

Really, the A.M.A. has at last recognized that there is a doctor shortage, and the brochure issued by the Missouri Agricultural Department (already mentioned in one of my letters) expressed the truth: This is how John H. Lane, Jr., Assistant Professor of Rural Sociology, summarized a few of the facts in answer to the question, "What Has Happened to the Country Doctor?"

"1. The population is outrunning the supply of doctors.

"2. Missouri medical services are moving cityward.

"3. Many registered doctors are not in private practice."

So many old doctors are being lost annually! Numerous country people are now doing without a doctor and the grandmothers recall old herb treatments. "A fresh supply of younger doctors is the only way the rural physician can be prevented from disappearing."

"The heavy demands of the rural doctor's widespread practice make it a losing battle for him to keep up with the fast pace of modern medicine."

"What can be done?"

We want doctors, not necessarily more hospitals. Shall we let the osteopaths furnish most of them?

I am pleased that the A.M.A. has printed "A Public Relations Manual": "The Human Side Against the Business Side of Medical Practice." Every practitioner should study this manual. There can be no doubt that the increased cost of medical service disturbs the patients and causes resentment against the doctor. What else could you expect? A shortage of any product or service inevitably raises the price. The fees of the rural physician are about as large as those of the metropolitan specialists.

John Zahorsky, M.D.
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Book Reviews

Textbook of Physiology. by William D. Zoethout, Ph.D., Professor Emeritus of Physiology in the Chicago College of Dental Surgery, (Loyola University); and W. W. Tuttle, Ph.D., Professor of Physiology, College of Medicine, State University of Iowa. Eleventh Edition. With 302 text illustrations and 5 color plates. C. V. Mosby Company, St. Louis, 1952. Price $4.75.

The prefacing statement of one author (W. D. Z.) explains that the aims of this book are to serve as an intermediate between the larger textbooks and the briefer texts, thereby furnishing students of dental, pharmacy and normal schools with a complete but not overwhelming review of physiology.

The chapters progress from basic understandings of protoplasm and its life's processes through enzymes and tissues. This is followed by gradual expansion into their chemical and physiologic properties; the effector and affector mechanisms, the homeostatic systems and the interrelation of all systems and tissue groups in maintaining, preserving and perpetuating the living organism.

The authors frequently pause to more closely reveal the position of basic concepts of chemistry and physics in the processes of life. There is frequent correlation and reference of one subject to a previous subject for the purpose of reminding the reader of the interplay of physical, chemical and electrical processes.

The text contains occasional reference to experimental work, which is necessarily and desirably brief. The more basically accepted facts and theories are presented throughout with only minimal referral to more theoretical problems and approaches. There is unfortunately no bibliography available to permit further pursual of a subject. The closing glossary presents rather concise clarification of terminology.

This text can be recommended to the physician who desires a review of basic physiologic concepts presented with a minimum of experimental data and theoretical deviations. H. F. H.

Anatomy of the Nervous System. Its Development and Function by Stephen Walter Ranson, M.D., Ph.D., Late Professor of Neurology and Director of Neurological Institute, Northwestern University Medical School, Chicago. Revised by Sam Lillard Clark, M.D., Ph.D., Professor of Anatomy, the Vanderbilt University School of Medicine, Nashville. New, 9th edition, 581 pages with 434 illustrations, 18 in color. W. B. Saunders Company, Philadelphia and London, 1953. Price $8.50.

This standard text on anatomy of the nervous system may be termed a true "perennial." The fact that it has gone through nine editions since 1920 is evidence of its genuine contribution to the study of this particular phase of medical science. The outstanding feature of this new edition is the blending of structure with function to bring about a clearer understanding of how the nervous system is made up and how it works. Advances made in the knowledge of neuroanatomy and neurophysiology since its last publication in 1947 have been added. The entire volume has 581 pages as compared to the last edition which comprised 532 pages. The new book contains 434 illustrations with 18 in color.

Beginning with a chapter on embryology and comparative anatomy of the nervous system, the book runs through the gross anatomy of the brain and spinal cord of man with detailed descriptions illustrated with beautiful drawings. A whole chapter, necessary for the basic understanding of this important system, is devoted to the study of cellular elements of neurones and neuroglia. Functions of these structures are also described.

Photomicrographs and actual photographs of prepared sections of the brain and spinal cord are frequently encountered where their inclusion enhances understanding. Of especial interest to students of neuroanatomy are the structure and function of the hypothalamus and thalamus in chapter XV. Much new knowledge on these masses of nuclei has been brought out by investigators in recent years.

Chapter XXI deals mainly with examples of clinical entities to provide mental exercise after the reader has finished the major portion of the book. It is presented in such a way that by "thinking scientifically" a diagnosis with exact localization of the lesion may be derived. Twelve of the fourteen cases described are well illustrated.

A good bibliography is found toward the end of the book.

In a work of this sort in which every detail is important and practically each sentence is "meat," consumption is slow. Even the pictures seem so complicated at times that great concentration is required in order to keep on the right track. For this reason, repeated reference to the text is mandatory if one is to be conversant with instead of confounded by this study of the nervous system. W. Q. W.

Diseases of the Heart and Arteries. Anatomical and Functional Disturbances of the Circulation. Treatment by George R. Herrmann, M.D., Professor of Medicine, University of Texas; Director of the Cardiovascular Service and Heart Station, University Hospitals; Consultant in Vascular Diseases, United States Marine Hospital; Consultant in Medicine to Surgeon General, United States Army. Fourth Edition. With 215 text illustrations and 4 color plates. C. V. Mosby Company, St. Louis, 1952. Price $12.50.

The fourth edition of Dr. Herrmann's treatise on "Diseases of the Heart and Arteries" presents considerable new material. A definite basis for diagnosis is set forth by careful evaluation of facts to be learned from history, from skillful physical examination, from relevant laboratory tests and from intelligent use of instruments of precision as well as methods of investigators employing instruments to study cardiac function and the status of the peripheral arterial circulation. There is valuable discussion to aid the practicing physician to judge the risks for patients undergoing surgical or obstetric treatments. Military cardiovascular examinations and interpretations are discussed thoroughly. In the appendix is contained much helpful information covering such topics as "Pathogenic Evidence of Heart Disease," "Details of the Diagnosis Criteria of Heart Disease," "The Inevitable Outcome of Heart Disease," "Common Errors in the Diagnosis of Heart Disease" and "Correction of Cardiovascular Deformities by Surgical Procedures." Finally, there is a table summarizing the findings during cardiac catheterization on patients with congenital heart disease.

In this textbook of 652 pages, with 215 illustrations and four color plates, Dr. Herrmann has provided a ready reference source on disease of the heart and arteries of immeasurable clinical importance.

F. S. M.

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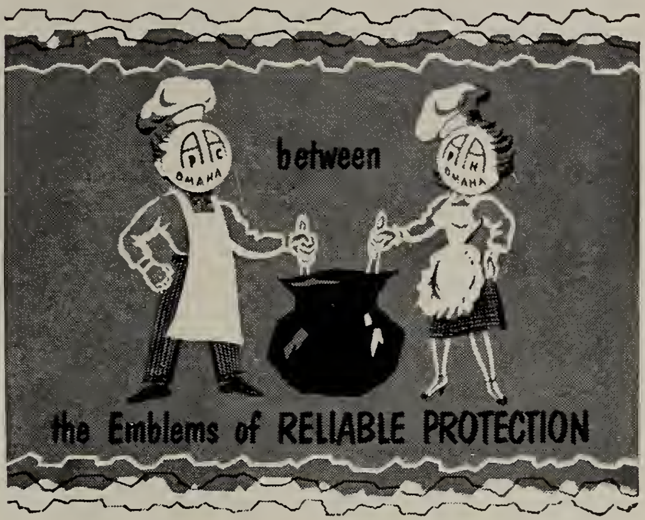
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MISSOURI MEDICINE

The Journal of the Missouri State Medical Association

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Surgery of Colon & Rectum, One Week, May 10
Thoracic Surgery, One Week, June 7
Esophageal Surgery, One Week, June 14
General Surgery, Two Weeks, April 26, July 26
Fractures & Traumatic Surgery, Two Weeks, June 7

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Gastroenterology, Two Weeks, May 17
Hematology, One Week, June 14

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Curiosa et Trivia

William B. McCunniff, M.D.

An American Indian method for reducing hip dislocations: a horse was deprived of water for at least a day, the patient was placed astride the animal, his feet tied together beneath the horse's belly. The horse was then allowed to drink as much water as possible, thus applying downward and outward traction to the patient's lower extremity, and probably reducing the fracture.

"Mad as a hatter" is a phrase not original in "Alice in Wonderland." It referred to tremors and mental disturbances due to mercury in persons making felt hats.

In case you missed the reports in the public press: Iowa physician, J. D. Ullinger, M.D., delivered his own third child during the last summer. The doctor, married to a 32 year old brunette, is 92 years old.

Two million, one hundred twenty-seven thousand, six hundred Americans were injured in traffic accidents in 1952 . . . an impressive figure written out! Twenty-five per cent of the fatal accidents involved drivers under the age of 25 . . . who constitute only 15 per cent of all drivers.

Only one fifth of 1 per cent of the entire population of the United States, approximately 237,000 persons, live more than 25 miles from a physician in active private practice.

The U. S. Dispensatory for 1877 reported the class of "injections" as ". . . a new class of preparations . . . very foolishly introduced among the addenda to the British Pharmacopoeia. . . . On what grounds it was separated from the liquors it is hard to perceive." And now we're accused of "parenteritis"!

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Guest Editorial

Missouri's New Medical School

President, Boone County Medical Society

James C. Cope, M.D., *Columbia*

This issue of Missouri Medicine announces some of the plans for the expanded University of Missouri Medical School. When these plans reach completion the impact will be felt by every physician of the state.

Let us remember that a physical plant and a staff do not make a medical school. To be a living institution it must receive its breath of life from the people of Missouri. The skillful treatment of the sick and the dissemination of the latest medical information is not enough. This school must boldly confront the problems that are peculiar to this community; its success will be measured by the solutions it will find. It may be said that, whatever heights are reached by the medical school, it will have been led there by the needs of the people it serves. Who is better equipped than we, the practicing physicians of Missouri, to know and to transmit the knowledge of these needs?

The knowledge of what is needed is the first step in progress. The fulfillment of the need is progress. Here then is our dual responsibility. We must supply the grist for the mill of research, and we must take home and apply the products of the grinding. Here also is found a twofold opportunity. First is the opportunity for helping to build what may be one of the outstanding medical centers in the country. Certainly without our help it will have but small success. Secondly is the opportunity for personal professional growth by having available a school that is devoted specifically to the problems of Missouri. For us to grow, however, we must use the opportunity; we cannot let it languish.

Others Say

All on the Same Team Now

. . . The fight over the location of the School of Medicine was long and acrimonious. It is reassuring to note . . . that the wounds of battle have been healed and sectional rivalries have been eliminated. The Missouri Medical Association . . . is now cooperating wholeheartedly . . . the alumni and friends of the university have joined hands . . . and the task of assembling a faculty, making plans for research, and planning the program is well underway.

There will be many benefits from this program . . . research will be greatly expanded . . . rural Missouri will have more doctors . . . emphasis . . . will be on the education of general practitioners, particularly for the rural areas.—Editorial, *St. Louis Globe-Democrat.*

A Real Step

Another step toward University of Missouri's Medical School, postponed for years because of controversies over its location, has been taken in the start of construction of the $13,500,000 medical center at Columbia.

This naturally is a real step in any such enterprise. . . . Missourians will watch with great interest the progress of this very important state undertaking.—Editorial, *Hannibal Post.*

Medicine No Occult Science

. . . Our patients today have more than just a smattering of medical knowledge and certainly appreciate being treated like adults. They have many reasonable questions about the meaning of tests and laboratory findings, about the diagnostic interpretations and in particular about the action of drugs which are prescribed and the results of surgical procedures. They would like straightforward answers. Here is one area of public relations that each and every physician can utilize daily. Let us take our patients into our confidence and remember that the days of magic and mystery departed with the bread pills and the leeches.—G. Wilse Robinson, Jr., M.D., Editorial, *Jackson County Medical Bulletin.*

. . . To Put It Bluntly . . .

It is unbecoming to anyone to benefit from the activities of others of his kind and yet to refrain from contributing to their efforts. . . .

Doctors' Day, a day designated nationally to honoring you as a doctor is coming up. In order to adequately publicize our society you have been asked to provide a recent photograph of yourself and fill out a questionnaire. Response has been poor as hell.—*Pettis County Medical Bulletin.*

"...when the patient is in acute distress from waterlogging..."

"Meralluride sodium solution (MERCUHYDRIN) in 1 to 2 cc. doses intramuscularly has been very effective and is not painful."* In acute congestive failure, MERCUHYDRIN characteristically curbs tissue inundation and relieves dyspnea, orthopnea and cardiac asthma.

Ampuls of 1 cc., 2 cc., and 10 cc. vials.

*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

MERCUHYDRIN®
(meralluride injection U.S.P.)

Leadership in diuretic research
Lakeside LABORATORIES, INC., MILWAUKEE 1, WISCONSIN

Missouri Academy of General Practice

William Shaw, M.D.

The Board of Directors of the Missouri Academy of General Practice, meeting in Jefferson City on March 7, revealed some interesting statistics relative to the postgraduate courses conducted in rural Missouri in 1953-1954.

Conducted by the Missouri Academy with the cooperation of the deans of the three medical schools and the Missouri State Medical Association, postgraduate courses were presented in sixteen carefully selected Missouri towns. Five monthly meetings, each with two excellent speakers, were held and formal Academy accreditation given for attendance at each meeting. Speakers were obtained from Washington University, St. Louis University and the University of Missouri schools of medicine.

Reports from the first four outstate postgraduate meetings indicated considerable variation in attendance. In one of the more sparsely populated southern communities the number of doctors present varied from fourteen to eighteen. In a town with a higher physician population the attendance varied from forty-eight to one hundred. With the final meeting not reported it was found that the doctors in rural Missouri had attended enough meetings to accumulate the enviable total of 2,500 hours of physician postgraduate instruction.

In addition to this well organized series of meetings other meetings were held at Chillicothe, Butler, Wentzville, Hannibal and Mexico. The Kansas City and St. Louis Academies of General Practice, constituent chapters of the Missouri State Academy, hold well organized and well attended courses annually. Other refresher courses for general practitioners are presented by the medical schools in their respective locations.

It is evident that ample postgraduate instruction is available for all members of the Missouri Academy of General Practice to maintain the number of hours required by the Academy for continued active membership. It is also evident that members of the Missouri Academy of General Practice and many other rural physicians in Missouri are availing themselves of this method of continuation study to keep abreast of the newer developments in medicine, a knowledge of which is imperative in the practice of modern medicine.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Us doctors can sure talk ourselves into some ingratiating situations and sometimes I get to wondering it it's all worth while. Here we all plug for voluntary health insurance and what happens —we get swamped with blanks and forms. And what forms they are—even more and a greater variety than Uncle Minor has hound dogs.

I swear I think 99 per cent of my patients now have some sort of insurance from the number that keep coming in. My desk looks like an old time editor's; either me or the blanks, one is going to have to move out.

And the most irritating situation is that the resemblance between any of them is lost after you get past the name, in full. Then comes, as if it isn't apparent from the name, sex. Birthday? Then you got to figure the age for them. Weight and height, that is important in deciding whether to pay the claim.

After you get them preliminary minor details in the fun really starts. Diagnosis, pregnancy, uterine, delivered. Acute, chronic, recurrent? Predisposing factors. Marriage! Ain't necessarily so. Two beers!! Time, date, and onset of symptoms. Now really there ain't many what can pinpoint the beginning that close. List dates and reasons for treatment in the past five years. Why in some patients that would fill a book.

Then comes how long confined in bed, indoors, outdoors, how long disabled, total, partial, and from what. When is the earliest date she can go back to work. You got to be a fortune teller too. And all blanks must be filled out Doc or you will have to do your homework over. Any day now I expect to have to start fingerprints.

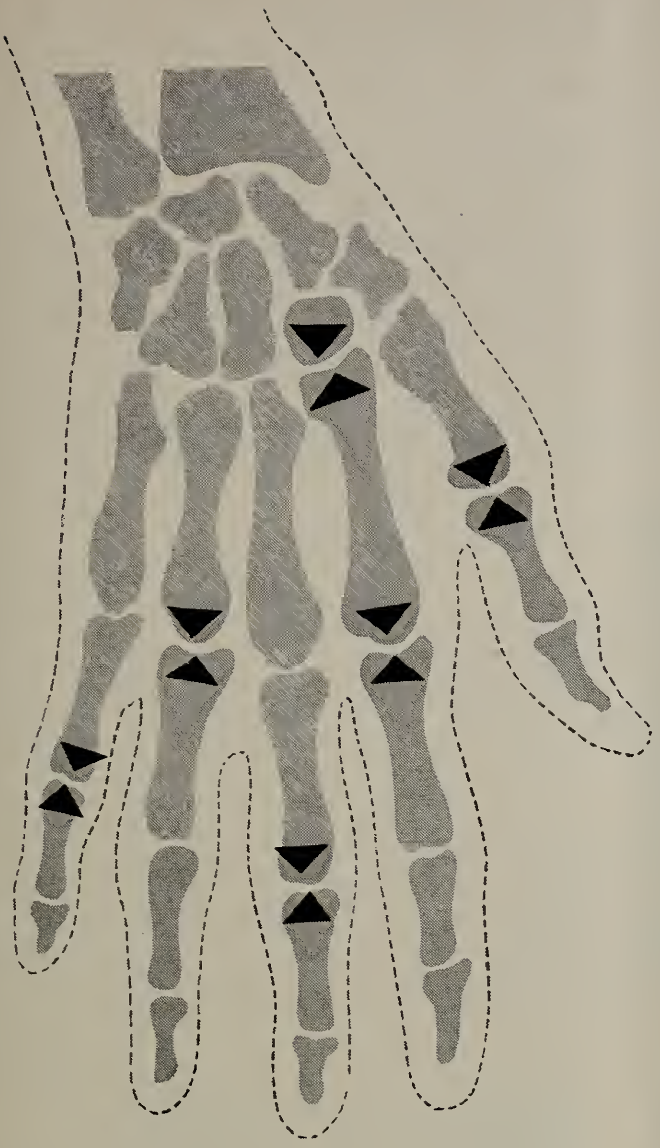
As I see it you fill them out for two reasons. First and my only concern is for what good it does the patient. Second, so the company can figure out a reason for not paying the claim.

Now I ain't claiming to be right smart but then it wouldn't take many brains to design a standard, short form with only the pertinate facts relating to the illness in question. Then all companies should adopt its use and they wouldn't have to send out nasty little notes informing you this is the third request.

Maybe if we all got together and just put in the really important information and left the rest blank they would take a hint. But then can you get doctors to agree on anything?

I got to get busy filling out some insurance forms!!

Your country nephew,
Pete



in arthritis and allied disorders

Rapid Relief of Pain
usually within a few days

Greater Freedom and Ease of Movement
functional improvement in a significant percentage of cases

No Development of Tolerance
even when administered over a prolonged period

BUTAZOLIDIN

(brand of phenylbutazone)

Its usefulness and efficacy substantiated by numerous published reports, Butazolidin has received the Seal of Acceptance of the Council on Pharmacy and Chemistry of the American Medical Association for use in:

- **Gouty Arthritis**
- **Psoriatic Arthritis**
- **Rheumatoid Arthritis**
- **Rheumatoid Spondylitis**
- **Painful Shoulder (including peritendinitis, capsulitis, bursitis and acute arthritis)**

Since Butazolidin is a potent agent, patients for therapy should be selected with care; dosage should be judiciously controlled; and the patient should be regularly observed so that treatment may be discontinued at the first sign of toxic reaction.

Descriptive literature available on request.

Butazolidin® (brand of phenylbutazone), coated tablets of 100 mg.

GEIGY PHARMACEUTICALS
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357

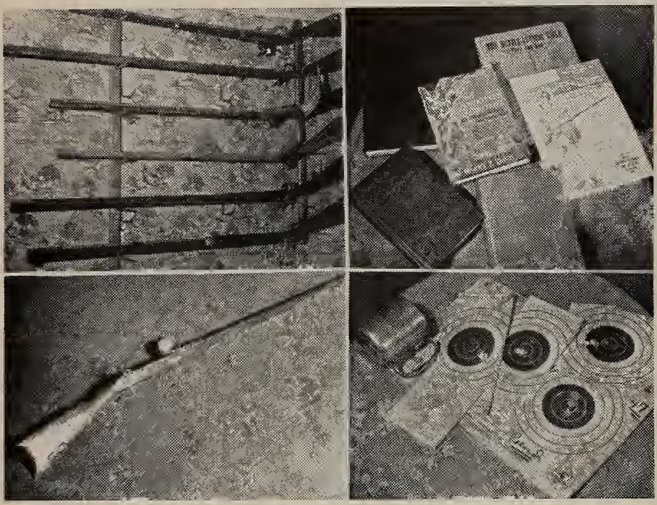
What Is Your Hobby Doctor?

Kentucky Rifles

THOMAS B. HALL, M.D.

When a physician writing from Westport, Missouri, in 1844 declared that "the most essential implement that one needed when embarking on the Western Trail was a good rifle," he was stating a well recognized fact that the hundred years' experience of those who had pushed the frontier west had demonstrated.

An instrument that played a major role in winning our independence and in the expansion of our country is worthy of interest, respect, preservation and veneration.



Collection of writer's rifles (description from bottom to top): heavy (17 pounds) .52 caliber cap lock target rifle; flintlock .41 caliber rifle; flintlock .29 caliber squirrel rifle; flintlock .36 caliber rifle; flintlock rifle with 4 foot barrel; not a Kentucky, but a breech-loading flintlock rifle (1829) made by J. Hall of Maine.

Cap lock rifle made by A & C Renick, Jackson County, Missouri, 1840-1850 period.

Books and magazines on Kentucky rifles.

Targets and "Jim Bridger" cup.

The skill of the German and Swiss artisans of Pennsylvania evolved by 1740 a weapon peculiarly suited to our needs. Although having a long barrel (40 to 48 inches) its relatively light weight (8 to 12 pounds) gave its user mobility. Shooting a round patched ball with high velocity (1500 to 2000 feet a second) which mushroomed on impact with terrific shocking and bleeding effect, combined with its superior accuracy, gave those skilled in its use outstanding advantage.

In the American Revolution, though often not the preponderant weapon (in numbers), it is acknowledged to have been of decisive effect at Saratoga, Cowpens, King's Mountain and other important battles. George Rogers Clark and his small band of Virginia riflemen successfully besieged the British in their fort at Vincennes. Unable to man the portholes because of the accuracy of the men with the long rifles, and subjected to a murderous cross-fire through small holes in the fort that guns at a distance were not supposed to be able to shoot through with any consistency, the British surrendered—and the upper Ohio Valley with its incomparable riches fell to us.

It was in the strongly contested "dark and bloody ground" of Kentucky that the rifle in the hands of Boone, Kenton and their followers was most strongly opposed by the Indians, and here again prevailed over all, and here received its present name.

In 1815, at New Orleans, the riflemen of Tennessee and Kentucky, under Jackson, dashed the last hope of the British of dominating the Mississippi Valley system.

Missouri made early and important contributions to those who defended and expanded our country with the rifle. Lead was mined by the French in Missouri as early as 1740. Much of this found its way east to the early American settlers. Black powder was made, using the bat droppings in the numerous caves for nitrate. In 1826, the Meramac Iron Works was established at Meramac Springs, near St. James. The iron for the famous Hawken rifles, made by Jake and Sam Hawken of St. Louis, was from this source. The Hawken was a sturdy rifle with all iron furniture, and of large caliber (.53). It was the favorite weapon of the mountain men and trappers who blazed many trails in the far west.

In 1933 the National Muzzle-loading Association was founded. This organization is concerned with collecting, preserving and shooting the old rifles. It has one of the finest rifle ranges in the United States at Friendship, Indiana, and publishes *Muzzle Blasts.* Kansas City has the "Black Powder Club" and St. Louis the "Gemmer Muzzle-loading Club." Gemmer was successor to Hawken. The Gemmer Collection is at the Missouri Historical Society, Jefferson Memorial, St. Louis.

Present day shooters of the old rifles have proved that the old guns, while of course not outshooting a modern target rifle, are capable of good accuracy. Most of the present rifle shooting (of both the old and modern rifles) is from a bench or belly shooting. The "Shooting Match" was for a hundred years a chief American sport. These times produced a large number of outstanding riflemen. Audubon describes the "barking" of squirrels by Daniel Boone. It is an authenticated fact that Mike Fink and others shot cups off each others heads at 30 to 60 yards, shooting off hand.

Largely thanks to his friends, Vic Allen, Master Gunsmith, and Walter Murphy, expert in metal

(Continued on page 350)

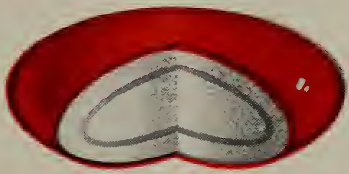
how one

CHLOR-TRIMETON

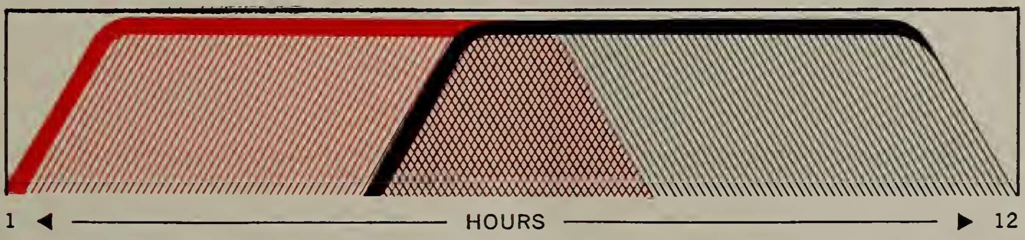
REPETAB

assures 8-12 hours' sustained relief in hay fever

Outer layer dissolves immediately providing rapid onset of relief



Special Timed Barrier (not enteric coating) releases inner layer for prolonged effect



Inner core still intact 2½ hours after ingestion of 6 special radiopaque REPETABS*

*Unretouched x-rays.

At 4½ hours disintegration of cores well underway—complete in four, beginning in two.*

the ***REPETAB*** *principle assures prolonged sustained relief with single dose convenience*

CHLOR-*TRIMETON*® Maleate, brand of chlorprophenpyridamine maleate.
REPETABS,® Repeat Action Tablets.

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CHLOR-TRIMETON *REPETAB*

SCHERING

With Our Auxiliary

Mrs. W. E. Martin, *President*

Thirty years ago our Auxiliary was organized in Springfield, Missouri, with the aims: to educate ourselves in matters of public health; secure the backing of women's organizations; and be a useful, constructive force in promoting the aims of the medical profession.

Today, our objectives are stated much the same, namely: to extend the aims of the Missouri State Medical Association, which look to the protection of public health and to the advancement of health education; to fulfill such functions as may be needed from it at medical meetings; and at all times to stimulate the spirit of cooperation and fellowship through the common bond of friendship.

These aims are our guide. We find people are health hungry. They need authentic information, palatably served and digested. When we advance health education by Public Relation meetings, promote *Today's Health,* furnish scholarships for nurses and medical students, interpret for the laity the aims and objectives of American Medicine, and the advances of medical science for the public good—we add to the dignity of the medical profession. How much diligence and sincerity we put into the task will determine our usefulness.

Our Auxiliary has always been a friendly organization. Doctors' wives everywhere have a common bond of friendship, but it takes the Auxiliary to seal them, and to make us realize the importance of knowing each other better. It is gatherings like our Annual Session, April 4 to 7, that bring us closer together, make us friends and coworkers, and send us home with renewed inspiration and happy memories of old and new friendships.

On our 30th anniversary in St. Louis, may we wish to grow in numbers, in usefulness to the medical profession, and in friendship among ourselves. May each member find the Auxiliary a thoroughly enjoyable, challenging and stimulating experience for service to her husband and his profession.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

One of our local doctors was walking down Ohio Street with his wife when they met a vivacious blonde in a vivid red creation who called out gayly, "Why, hello Doc!"

The local doctor nodded stiffly and walked on. His good frau eyed him suspiciously "And just where," she demanded, "Did you meet that person, my dear?"

"Oh," said the Doc, "that is just a young woman I met professionally."

"Umm," murmured his spouse, "Whose profession, yours or hers?"

Stephen Paget said "You cannot be a perfect doctor until you have been a patient, you cannot be a perfect surgeon until you have enjoyed in your own person some surgical experience."

One of the local doctors frequently described his patients' condition as being in "status quo." One of the nurses puzzled by this phrase finally asked him what it meant. He replied, "In one hell of a shape."

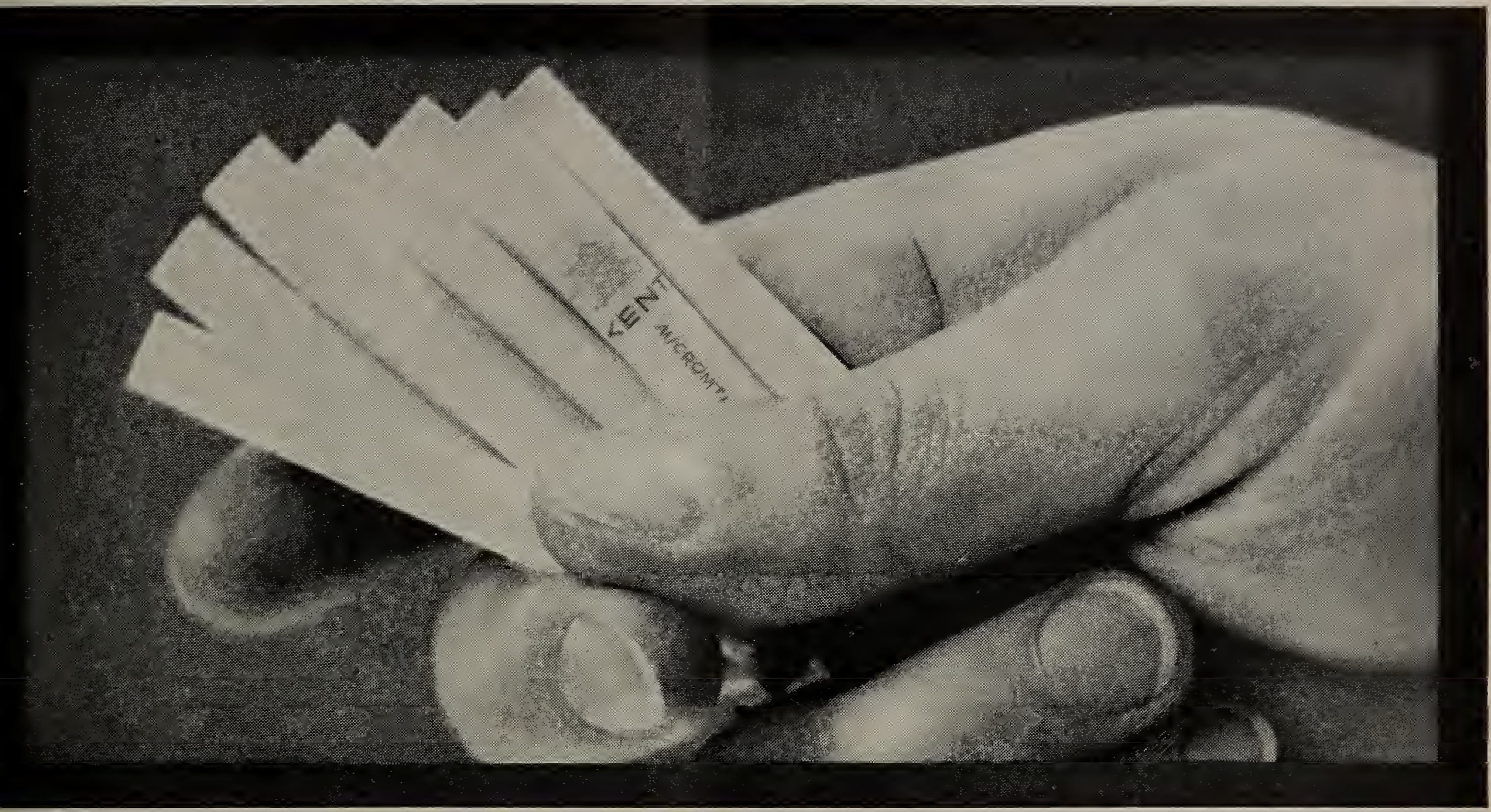
Many of my patients' ailments are not only chronic but chronicle.

Now that the market has reached a saturation point on the mycins, cillens and sulfas, the latest promotion seems to be exotic oriental preparations for hypertension. I wonder what's happened to such old fashioned items as quinine, calomel, strychnine and salol.

In this age of specialization, I was surprised to read that in 1500 B.C. the citizens of Thebes were complaining that there were no longer any good old family physicians. They stated that "The practice of medicine is so divided among them that each physician is the healer of one disease and no more. All the country is full of physicians, some of the eye, some of the teeth, some of what pertains to the belly."

One of my insomniac patients insisted on some new sleeping tablets. "Why the ones I'm taking only put me in a semi colon state," she complained.

Why is it, Doctor, that one filter cigarette gives so much more protection than any other?



The answer is simply this: Among today's nine brands of filter cigarettes, KENT, and KENT alone, has the *Micronite Filter*...made of a pure, dust-free material that is so safe, so effective it has been selected to help filter the air in hospital operating rooms.

In continuing and repeated impartial scientific tests, KENT's Micronite Filter consistently proves that it takes out *more* nicotine and tars than *any* other filter cigarette, old or new.

And yet, with all its superior protection, KENT's Micronite Filter lets smokers enjoy the full, satisfying flavor of fine, mellow tobaccos.

For these reasons, Doctor, shouldn't KENT be the choice of those who want the minimum of nicotine and tars in their cigarette smoke?

KENT
CIGARETTES
WITH THE MICRONITE FILTER

Kent ... the only cigarette with the
MICRONITE FILTER
for the greatest protection in cigarette history

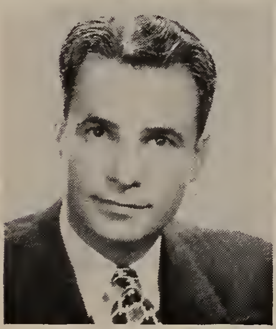
ENT'' AND ''MICRONITE'' ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

Missouri Medicine in Review

LEO H. POLLOCK, M.D.

MAY 1914

The Texas supreme court has ruled out the Chiropractor in that state.



Governor Hodges of Kansas has refused to appoint the licensing board of chiropractors as provided by the bill passed by the last legislature.

The St. Joseph-Buchanan-Andrew County Medical Society has resolved to be incorporated under the laws of the State of Missouri.

Radium and Radium Salts have been added for inclusion in "New and Nonofficial Remedies." Radium may be administered in baths, by subcutaneous injection in the neighborhood of an involved joint (1.25 to 0.5 microcurie in 1 or 2 cc. distilled water), by local application as compresses (5 to 10 microcuries), by mouth as a drink (increasing doses from 1 to 10 to 10 microcuries three or more times a day), by inhalation, the patient for two hours daily remaining in the emanatorium, which contains 0.0025 to 0.25 (average 0.1) microcurie per liter of air.

MAY 1929

Iso-Iodeikon (brand of phentetiothalein N.N.R. marketed in 2.5 gm. ampoules by Mallinkrodt Chemical Works, St. Louis contains from 56 to 59 per cent of iodine). Used for the roentgenologic examination of the gallbladder and simultaneous test of hepatic function. Following intravenous injection, it appears in the normal gallbladder in sufficient concentration to cast a shadow and if the liver is damaged it is retained in the blood indicative of the extent of impairment.

At Bundaburg, Australia, last January, twelve of twenty-one children inoculated with diphtheria toxin-antitoxin at one time died within the next few days. The mixture used was issued in rubber-capped bottles, but without an antiseptic, to avoid possible risk from freezing. Evidently the vial was contaminated during several shots, and without an antiseptic, the organisms multiplied in the fluid.

Hazen A. Horton is advertising the New Day Improved Appliance which exercises an elastic pressure on the spermatic cord, causing testes to receive an increased blood supply, get better nourishment and produce a greater quantity of hormones, thereby restoring lost manhood and rejuvenating the body in general "without an operation."

MAY 1944

A portrait of Andrew Walker McAlester, the "Father of the School of Medicine" has been presented by his family to Dean Conley to be placed in the medical building at the University of Missouri.

The 87th Annual Session of the Missouri State Medical Association convened in Kansas City, April 23, 24 and 25.

Lt. Col. Curtis H. Lohr, St. Louis, now serving overseas, was installed *in absentia* as President. Dr. Robert Mueller, St. Louis, read a message written by Col. Lohr. Dr. A. W. Bristow, Princeton, was elected President-Elect.

St. Vincent Hospital, Monett, was formally dedicated at a ceremony on April 2.

Dr. C. C. Ault, Fulton, was elected president of the Rotary Club at Fulton.

Dr. L. J. Schofield, Warrensburg, was presented a gold service pin for fifty years of service in the Masonic Order at a program at Warrensburg.

What Is Your Hobby Doctor?

(Continued from page 346)

work, all of the writer's guns are in good shooting condition.

Shooting a good score with the old rifles requires more effort and time than with the modern rifle, and is therefore more rewarding when accomplished.

The decisive effect of the rifle on the history of our country is too little appreciated. However, expressions we still use, as "dead center," "rifled," "long as a rifle barrel," and many others, indicate its constant presence and influence on our lives in the past.

Let us salute the Kentucky rifle, and the magnificent riflemen who used them!

Others Say

A Poorly Informed Electorate?

. . . I dare say that there are many physicians in St. Louis today who have no knowledge of the work and decisions of our Committee on Legislation. How can they be forceful in discussing these problems? How can they be encouraged to read the Organization Section of THE JOURNAL? Is there a better way of bringing greater understanding of medicoeconomic problems into the doctor's living room? Can a better method be designed to bring medical problems to the busy doctors?—Edward J. McCormick, M.D., President's Address, St. Louis A.M.A. Session.

ISTINCTIVE AMONG POTENT HYPOTENSIVES FOR THESE

14 DESIRABLE PROPERTIES... Veriloid®

ACCEPTED
COUNCIL ON PHARMACY AND CHEMISTRY
AMERICAN MEDICAL ASSOCIATION

A selective alkaloidal extract of hypotensive principles obtained by fractionation from Veratrum viride. Representing less than 1% of the whole root, it is freed from the dross of the mother substance. It is generically designated alkavervir. In the management of hypertension it presents these desirable properties.

1 Biologic assay—based on actual blood pressure reduction in mammals—assures uniform potency and constant pharmacologic action.

2 Blood pressure is lowered by centrally medicated action; there is no ganglionic or adrenergic blocking.

3 Therapy is rarely, if ever, fraught with the danger of postural hypotension.

4 Hypotensive action is independent of alterations in heart rate.

5 Cardiac output is not reduced.

6 Renal function, unless previously grossly reduced, is not compromised.

7 Cerebral blood flow is not decreased.

8 Cardiac work is not increased, tachycardia is not engendered.

9 No dangerous toxic effects from oral administration, no deaths attributable to Veriloid have been reported. Side actions of sialorrhea, substernal burning, bradycardia, nausea, and vomiting (due to over dosage) are readily overcome and thereafter avoided by dosage adjustment.

10 In broad use over five years, literally in hundreds of thousands of patients, no other sequelae have been reported, whether Veriloid is given orally or parenterally.

11 Tolerance or idiosyncrasy rarely develops; allergic reactions have not been encountered. Hence tablets Veriloid can be given for the long treatment needed in severe hypertension.

12 Continuing therapy with Veriloid has not led to interference with appetite or with excretory function.

13 Because of its rapidly induced, prolonged action (6 to 8 hours), tablets Veriloid provide around the clock hypotensive effect from 4 doses daily, make today's dosage effective today, and usually prevent hypertensive "spiking" during the night.

14 A notable safety factor in intravenous administration: *extent to which blood pressure is lowered is directly within the physician's control.*

Tablets Veriloid

The slow-dissolving, scored tablets are supplied in 2 mg. and 3 mg. potencies. In moderate to severe hypertension they produce gratifying response in many patients. According to published reports[1] this response can be maintained for long periods in fully 30% of patients; combination with other hypotensive agents has been credited with greatly increasing this percentage.[2] Initial daily dosage 9 mg., given in divided doses, not less than 4 hours apart, preferably after meals. To be increased gradually, by small increments, till maximum tolerated dose is reached. Maintenance dose 9 to 24 mg. daily.

Solution Intravenous

For immediate reduction of critically elevated blood pressure in hypertensive emergencies such as hypertensive states accompanying cerebral vascular disease, hypertensive crisis (encephalopathy), the toxemias of pregnancy. It lowers the blood pressure promptly, to any degree the physician desires, and with notable safety.[3] If excessive hypotensive and bradycardic effects should be invoked they are readily overcome by simple means. Supplied in boxes of six 5 cc. ampuls. The solution contains 0.4 mg. of Veriloid per cc.

Solution Intramuscular

For maintenance of blood pressure in such critical instances, and for primary use in less critical situations which do not show the same immediate urgency. Provides 1.0 mg. of Veriloid per cc. in isotonic aqueous solution incorporating one per cent procaine hydrochloride. A single dose lowers the blood pressure significantly, reaching its maximum hypotensive effect in 60 to 90 minutes. By repeated injections (every 3 to 6 hours) blood pressure may be kept depressed for hours or days if necessary.[4] Supplied in boxes of six 2 cc. ampuls. Complete instructions as to dosage and administration accompany every ampul of the parenteral preparations of Veriloid and should be noted carefully.

---

1. Kauntze, R., and Trounce, J.: Treatment of Arterial Hypertension with Veriloid (Veratrum Viride), Lancet 2:1002 (Dec. 1) 1951.
2. Wilkins, R. W.: Combination of Drugs in the Treatment of Essential Hypertension, Mississippi Doctor *30*:359 (Apr.) 1953.
3. Stearns, N. S. and Ellis, L. B.: Acute Effects of Intravenous Administration of a Preparation of Veratrum Viride in Patients with Severe Forms of Hypertensive Disease, New England J. Med. *246*:397 (Mar. 13) 1952.
4. Moyer, J. H., and Johnson, I.: Intramuscular Veriloid (Aqueous Solution) As a Hypotensive Agent, Am. J. M. Sc. *226*:477 (Nov.) 1953.

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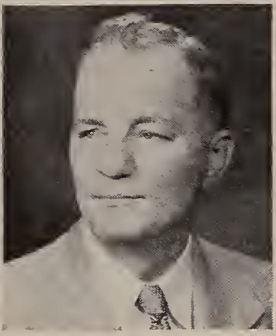
President's Comments

A new year for the Missouri State Medical Association began with the closing of the 96th Annual Session. It is my sincere hope that this ensuing year will be as valuable a year to the medical profession as the one just past and I ask of the members their assistance in making it such.



Officers elected at the 96th Annual Session who will be responsible to the members of the Missouri State Medical Association during the remainder of 1954 and through the early part of 1955 are: President-Elect, Victor B. Buhler, M.D., Kansas City; Vice Presidents, Edwin C. Ernst, M.D., St. Louis, B. L. Murphy, M.D., Hannibal, R. Lee Hoffman, M.D., Kansas City; Secretary, E. Royse Bohrer, M.D., Jefferson City; Treasurer, Carl F. Vohs, M.D., St. Louis.

W. S. Sewell, M.D., Springfield, will serve as Chairman of the Council, and Raymond O. Muether, M.D., St. Louis, Vice Chairman. The remainder of the Councilors are Donald M. Dowell, M.D., Chillicothe; W. F. Francka, M.D., Hannibal; Otto W. Koch, M.D., Clayton; J. Loren Washburn, M.D., Versailles; G. C. Stauffacher, M.D., Sedalia; Richard H. Kiene, M.D., Kansas City; J. H. Summers, M.D., Lebanon; Ben M. Bull, M.D., Ironton.

Delegates to the American Medical Association elected to begin service on January 1, 1955, were A. S. Bristow, M.D., Princeton, with William J. Shaw, M.D., Fayette, as alternate, and Durward G. Hall, M.D., Springfield, with Guy N. Magness, M.D., University City, as alternate. Delegates serving during 1954 are Paul Baldwin, M.D., Kennett; Joseph C. Peden, Sr., M.D., St. Louis; F. L. Feierabend, M.D., Kansas City, and A. S. Bristow, M.D., Princeton.—H. E. Petersen, M.D.

Others Say

Another Arthritis Aid

... The local injection of hydrocortisone is a very useful office procedure in a large variety of arthritis and allied disorders. For the drug to be effective as a therapeutic agent, it is felt that the relief of pain must be great enough and last long enough to prevent the patient from returning to the clinic or office at frequent intervals for reinjection.... This drug does not supplant the usual conservative measures but helps to make them more effective and in some cases has prevented hospitalization and surgical procedures.... No serious complications have been encountered ... there has been no occurrence of allergic reaction to the drug.... The only contraindications to its use are infections.—Fred C. Reynolds, M.D., and R. H. Ramsey, M.D., St. Louis, *Southern Medical Journal.*

Individual Ground Rule

I feel that the medical profession has a formula which can assist it to make the proper decision when decision is necessary. We can test our proposals and theories on the simple formula: IS IT FOR THE GOOD OF THE PATIENTS? We must always ask: "Is what we are about to do to the best interest of the patient; will the care of the sick be improved; will recovery be hastened; will fear, pain, discomfort, or anxiety be minimized?" Any proposal which does not ultimately affect the care or welfare of the sick can be considered as essentially unimportant.—R. O. Muether, M.D., St. Louis, Inaugural Address, St. Louis Medical Society, *Bulletin of the St. Louis Medical Society.*

Small Bowel Obstruction Following Surgery

Postoperative mechanical small bowel obstruction following abdomino-perineal resection of the rectum is a relatively frequent and often fatal complication. Twenty-eight per cent of the postoperative deaths in the present series were a direct result of this complication....

Most of the obstructions occurred early ... the terminal ileum was obstructed in all cases ... the site of the colostomy ... seems to be unimportant.

Since no obstruction occurred in 12 cases in which the pelvis was left open, it is inferred that in cases in which reperitonealization is unsatisfactory or dubious the procedure should not be done.—George L. Watkins, Jr., M.D., Farmington, *Archives of Surgery.*

Illiterate Scientists?

Our medical schools train the students to do a highly specialized job. It is, of course, the job of schools to see that the student is prepared as a scientist, but he must be prepared also to enter society as an interpreter of that science and to see that it is practiced in a humane way.

All eighty-one medical schools in the United States require at least sixteen hours of chemistry and eight of biology and physics. Seventy-five require eight hours of English and a median of eight hours of foreign languages. But none requires any other courses in humanities. On the basis of these figures, I think we can fairly indict medical education.—W. Clarke Wescoe, M.D., Address at Phi Beta Kappa Association of Kansas City.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 May, 1954 Number 5

Cancer of the Lip

Control of the Primary Lesion

HENRY SCHWARZ, II, M.D., and JOSEPH C. LESSER, M.D., *Columbia, Mo.*

The literature pertaining to the control of the primary lesion in lip cancer must be confusing to the average practicing physician. For example, in March of 1950, there appeared in two widely circulated journals, two articles which dealt with the treatment of lip cancer. The conclusions that were drawn by each group of authors were quite divergent indeed. From the first article we quote: "When the lesion is found to be under 1.5 cm. in diameter and is 4 or 5 mm. deep in an elderly patient or one who refuses sane operative treatment, irradiation may be used with variable results.[1] The authors concede that if a patient must be treated by some form of radiotherapy, the method of choice is as follows: "6,000 to 7,000 r of unfiltered irradiation . . . this therapy is given in broken doses at five or six sittings, spaced at two or three days intervals. . . ."[1] To one even casually acquainted with the basic principles of radiotherapy, it is quite evident that this suggested treatment is the radiotherapeutic equivalent of a blow torch, soldering iron or cancer paste. The authors were obviously surgeons. The second article to which we refer was simply entitled, "Irradiation as the Preferred Treatment of Cancer of the Lip."[2] In this modest work, the authors describe the subsequent fate of some 208 patients whose lip cancers were treated by radiotherapeutic measures. The authors conclude that radiotherapy is the *sine qua non* as far as the treatment of the primary lesion in lip cancer is concerned. These authors are as one might suspect, radiotherapists. Both groups expressing these diametrically opposed views present excellent evidence to uphold their respective claims, undoubtedly both are quite correct. The point is, however, that each has ignored the intrinsic merits of those approaches that are not their own. In this paper, we wish to point out the merits of each approach to the control of the primary lesion in lip cancer and formulate some plan of treatment that would provide the maximum utilization of the better aspects of both methods.

To attempt to provide this information, the case material at the Ellis Fischel State Cancer Hospital has once again been subjected to evaluation. In the past, del Regato[3] has reported on the radiotherapeutic aspects of some of the earlier cases, and more recently Modlin[4] has taken up the problem of neck dissections in cancer of the lower lip. Although this aspect of the treatment of lip cancer is again under scrutiny with the addition of more cases, we wish to confine ourselves in this paper to the control of the primary lesion in lip cancer. Specific reference to the problem of cervical metastases will be made only as it pertains to the treatment of the primary lesion in the lip.

It should be noted that since the hospital opened its doors to patients in 1940, that the surgeon, the radiotherapist and pathologist have worked together as a team in developing the plan of therapy for each patient referred to the hospital. Although technics have slowly altered over the years, and a preponderance of patients may, at one time or another, have been treated by a single technic for short periods, we believe that there is now sufficient homogeneity in the case material that will permit us to draw some rough comparisons. From these comparisons, working principles might then be formulated to utilize the better aspects of both the surgical and radiotherapeutic control of the primary lesion of lip cancer.

THE CASE MATERIAL

Cases were selected from the files of the hospital from the year 1940 through the year 1950. Only patients who received their initial treatment under our direction were selected for evaluation, all those having received prior treatment elsewhere were excluded. This permitted a minimum

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of a three year follow-up on all patients, and the status of all of these patients could be determined.

There were 351 cases in this series, 252 of which were capable of a five year follow-up. All were pathologically proven epidermoid cancer. The five year absolute survival rate of this group was 66.2 per cent. Excluding those patients in this group who died of diseases other than lip cancer, the five year net survival rate was 88.0 per cent. In all cases, the five year accumulative survival rate was 68.8 per cent. This approximates the absolute rate (table 1). Since the case material was predominantly male (M : F : : 38 : 1) and the mean age was 65.4 years, the average life expectancy of this group exclusive of their lip cancer could be calculated to approximate a five year absolute survival rate of 79.5 per cent.

TABLE 1.

351 CASES OF EPIDERMOID CANCER OF THE LIP PREVIOUSLY UNTREATED—TREATED AT THE ELLIS FISCHEL STATE CANCER HOSPITAL DURING THE PERIOD 1940 THROUGH 1950

1. 252 Cases Capable of a 5 Year Followup	
(a) 5 Year Absolute Survival Rate	.662
(b) 5 Year Net Survival Rate Excluding Non-Cancer Deaths	.880
2. 351 Cases Capable of a 3 Year Followup	
(a) 3 Year Absolute Survival Rate	.738
(b) 5 Year Accumulative Survival Rate	.688

The preceding paragraph provides in general terms, a broad view of the material taken for examination. To come to the point of the discussion, namely the control of the primary lesion in lip cancer, the case material may be conveniently broken into three major groups:

1. Cases without clinically demonstrable cervical metastases at the time of treatment of the primary lesion. There were 323 cases.
2. Cases with clinically positive cervical nodes at the time of treatment, whose metastases could be attacked surgically. There were twenty cases.
3. Cases in whom either the local or metastatic disease had extended to the point that they were no longer considered salvagable, requiring palliative treatment. There were eight cases.

Figure 1 describes the survival curve for each of these individual groups. When these curves are contrasted with the expected survival, it becomes quite evident that when metastases to the cervical nodes develop in epitheliomas of the lip, that the disease becomes quite a fatal form of cancer.

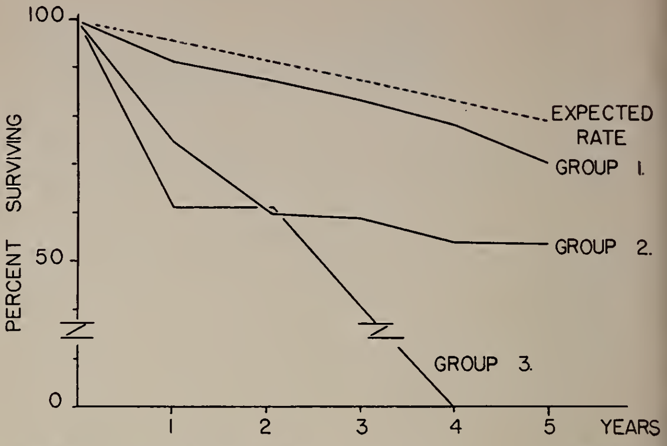

Fig. 1. Survival curves in lip cancer. Group 1 represents 323 cases without evidence of cervical node metastasis at the time of treatment; Group 2 represents twenty cases with cervical node metastasis at the time of treatment, whose nodes were treated surgically; Group 3 represents eight cases whose lesions were extremely far advanced and treatment considered palliative in character.

In the group of 323 cases, in which the cancer was clinically confined to the primary site at the time of treatment, thirty-two cases (10 per cent) subsequently developed cervical lymph node metastasis. The five year accumulative survival rate for this group of thirty-two cases is 54.7 per cent. This closely approximates the rate for those with clinically positive cervical nodes at the time of their initial treatment. Seventy-five per cent, or twenty-four of thirty-two cases, developed their metastases within the first twenty-four months of follow-up. The implications of these observations will be discussed later.

In the same group of 323 cases, regardless of the size of the primary lesion or the type of therapy employed, there were twenty-one cases (6.5 per cent) that developed persistent disease at the site of their primary lesion. When these cases are categorized by size of lesion and by type of therapy, the results of treatment in terms of local persistence of disease may be demonstrated (table 2). Inspection of this table reveals that the differences in terms of local persistence between the radiotherapeutic and surgical approach are small indeed. These differences are actually small

TABLE 2.

RELATION OF SIZE OF LIP CANCER TO TYPE OF TREATMENT IN TERMS OF PERSISTENCE OF THE PRIMARY TUMOR—323 CASES.

	SURGERY			RADIOTHERAPY		
Size In Cm.	*No. of Cases*	*No. of Recurrences*	*Rate*	*No. of Cases*	*No. of Recurrences*	*Rate*
<1.4	78	2	.026	43	2	.047
1.5—2.4	41	3	.073	84	6	.071
2.5—3.4	3	0	...	38	0	...
3.5—4.4	2	0	...	15	2	.133
>4.5	4	2	.500	10	4	.40
No Size	..	..	...	5	0	...
TOTAL	128	7	.055	195	14	.072

TABLE 3.

RELATION OF HISTOLOGIC GRADE TO TYPE OF TREATMENT IN TERMS OF PERSISTENCE OF THE PRIMARY TUMOR —323 CASAS

	SURGERY			RADIOTHERAPY		
Grade of Lesion	*No. of Cases*	*No. of Recurrences*	*Rate*	*No. of Cases*	*No. of Recurrences*	*Rate*
I	106	5	.047	131	8	.061
II	14	2	.143	33	4	.121
No Grade	8	0	...	31	2	.065
TOTAL	128	7	.055	192	14	.072

enough to be chance variations, rather than be attributable to the method.

As a corollary to this observation, when the pathologic grade of the tumor is contrasted with the type of treatment in terms of local persistence of cancer (table 3) again only small differences are found to exist. These may also be variations due to chance, and hence little or no significance may be attached to them. It is to be understood however, that these observations represent the summation of our experience in a retrospective manner, and that at no time during the period that this case material was acquired, was any conscious effort made in the form of designed clinical experiment to test these differences.

We feel that the conclusion at this institution, at least, based on the data noted in this paper that the surgical and radiotherapeutic control of the primary lesion in lip cancer is about equally effective. This observation is further supported by the papers quoted in the preceding paragraphs[1, 2] and reviewed in this light, they are no longer in conflict. The problem then is to develop a general plan to include the better aspects of both approaches.

DISCUSSION

Having made the observation that, in terms of local control of cancer of the lip, radiotherapy and surgical excision produce roughly equivalent results, one must then seek other criteria for the application of these technics. These criteria must then be sought in terms of a functioning oral stoma and the cosmetic results of treatment. We realize that it is sometimes difficult to fit individuals into broad categories, and in each case at this hospital, the individual is still considered for therapy by the entire staff; yet some generalizations may be drawn. These generalizations are summarized in table 4.

A. The small lesion, occupying less than 1/3 of the width of the lip and of shallow depth (less than 1.5 cm.), can best be handled by a simple "V" type surgical excision. This procedure will provide an adequate margin of normal tissue with the excised specimen. The result, as far as the patient is concerned, will be satisfactory with regard to the function and appearance of the oral stoma (fig. 2).

B. Lesions somewhat larger in width, greater than 1/3 of the lip's width, but still remaining rather superficial, less than 1.5 cm. in depth, are treated by radiotherapeutic measures. The technic, presently in use, is that of fractionated external roentgentherapy. The details of the technic are those described by del Regato.[3] In the past, curietherapy in the form of radium molds were used and, as far as its effectiveness is concerned in the control of the primary lesion, the results between this and x-ray therapy are about equal (table 5). It is felt, however, that the latter form of treatment affords a somewhat better cosmetic result. The surgical approach to lesions of this type would necessitate some form of reconstruction of the lip, which no matter how cleverly executed, is still only a substitute for a normal appearing and functioning lip (fig. 3).

C. In the more advanced lesions, in terms of

TABLE 4.

SELECTION OF TYPE OF THERAPY FOR CONTROL OF PRIMARY LESION

	Width of Tumor	*Depth of Penetration*	*Type of Therapy*
A.	Small <1/3 Lip	Shallow <1.5 cm.	Surgical Excision
B.	Wide >1/3 Lip	Shallow <1.5 cm.	Radiation Therapy
C.	Wide >1/3 Lip	Deep >1.5 cm.	Surgical Excision with Primary Reconstruction
D.	Wide >1/3 Lip	Extension Beyond Lip to Involve Contiguous Structures	Surgical Bloc Resection Usually with Radical Neck Dissection

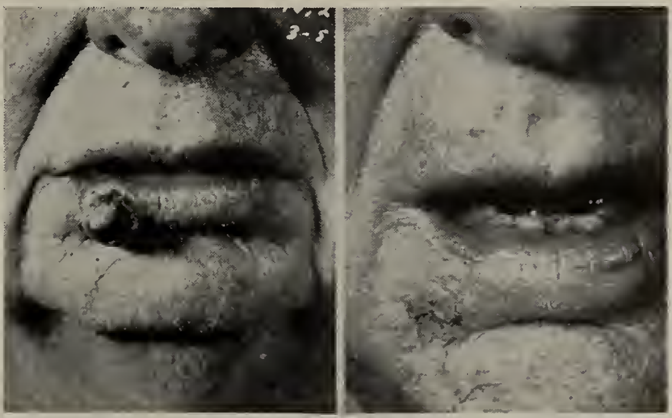

Fig. 2. A. Preoperative and postoperative views of a small shallow lesion treated by surgical excision.

TABLE 5.

RELATION OF SIZE TO TYPE OF RADIOTHERAPY IN TERMS OF PERSISTENCE OF THE PRIMARY TUMOR —190 CASES*

	ROENTGEN RAY			CURIETHERAPY		
Size in Cm.	*No. of Cases*	*No. of Recurrences*	*Rate*	*No. of Cases*	*No. of Recurrences*	*Rate*
<1.4	28	1	.035	15	1	.067
1.5—2.4	58	5	.086	26	1	.038
2.5—3.4	35	0	...	3	0	...
3.5—4.4	14	2	.140	1	0	...
>4.5	10	4	.40	..	..	...
TOTAL	145	12	.083	45	2	.044

* 5 Cases with no size listed were excluded
* 5 Cases With No Size Listed Were Excluded

width and depth, it is usually evident that tumor has already destroyed normal lip substance, the loss of which requires surgical restoration to provide a functioning lip. In cases such as this, we feel that these should be controlled by surgical extirpation followed by reconstruction of the lip. This repair is usually carried out at the time of the treatment of the primary lesion (fig. 4). When sufficient tissue cannot be obtained locally, one must occasionally stage the reconstruction. This approach, which is purely surgical, eliminates the necessity of carrying out a surgical procedure in an area that has been subjected to intensive irradiation and, consequently, the functional and cosmetic result is somewhat better.

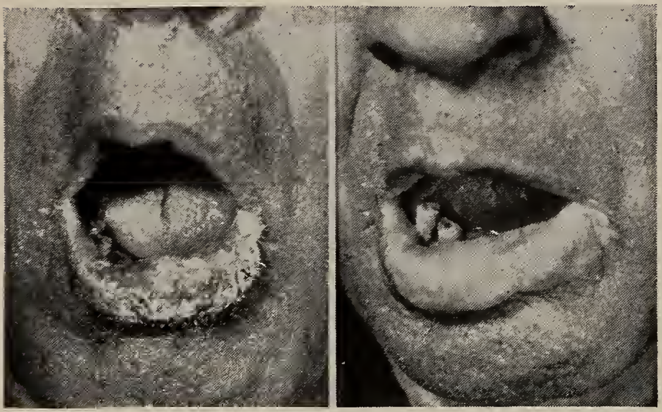

Fig. 3. B. Pretherapy and post therapy photographs of a wide yet shallow lesion treated by external roentgentherapy. Note the preservation of lip substance and cosmetic result.

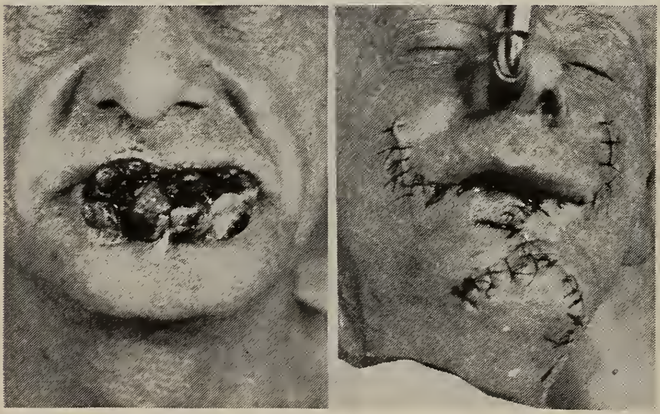

Fig. 4. C. Preoperative and postoperative views of a wide, deeply penetrating lesion. Reconstruction of the lip was carried out as a primary procedure.

D. In the extremely far advanced cases the surgical approach is again the approach of choice. In this situation, the primary objective of the surgeon is the control of the lesion which now involves contiguous structures, i.e., mental foramen, mandible by direct invasion, cheek, buccal sulcus. These far advanced lesions are also usually associated with metastatic disease in the cervical nodes. Most frequently, some form of bloc resection is required to control these lesions with appearance and function assuming a secondary role in the plan of treatment (fig. 5).

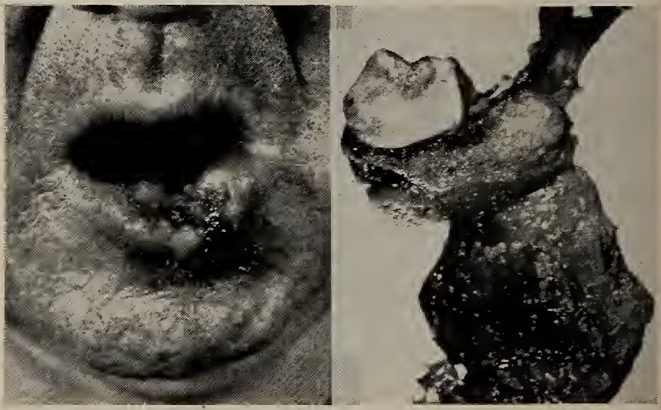

Fig. 5. D. Photographs depict a patient with far advanced local and metastatic lip cancer, yet still operable by means of a bloc resection of lip, jaw and neck.

To mention the control of cervical metastases briefly, it may be indicated that from our data, we do not feel that there is sufficient justification to warrant prophylactic neck dissections. In the 323 cases in which only the primary lesion was present at the time of treatment, thirty-two cases (10 per cent) developed subsequent cervical lymph node metastasis. In reviewing this group of cases, there was nothing characteristic about them that would permit the prediction that metastases would develop. Modlin[4] pointed this out in a previous publication; the case material now, which of course is much larger, simply confirms this observation. It would seem unreasonable to perform a large number of unnecessary operations in this age group (65 years) with all the risks that are characteristic of this advanced age. When such an operation becomes necessary, we feel that the full radical neck dissection is to be preferred over the more limited so-called "upper neck" dissections, which are anatomically as vague in scope as the name implies.

SUMMARY

1. On the basis of the case material at the Ellis Fischel State Cancer Hospital from 1940 through 1950, it has been demonstrated that radiation therapy and surgical excision are about equally effective in the control of the primary lesion of lip cancer.

2. A general plan of therapy, based upon the restoration of function of the oral stoma and its cosmetic appearance, has been suggested.

3. Careful, frequent follow-up examinations are stressed for those who have no clinical evidence of cervical metastatic disease at the time of treatment of their primary lesion. We have been unable to demonstrate any adequate rationale for the prophylactic neck dissection.

Ellis Fischel State Cancer Hospital.

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The Adducted Forefoot

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Forefoot adduction is a fairly common clinical entity that is encountered on any orthopedic service. The condition may be part of a congenital clubfoot deformity or it may exist primarily as a separate entity. When it is a residual deformity of a congenital equino varus deformity, it often stubbornly resists correction.

As a primary condition encountered in young babies and infants, it usually can be fairly easily and rapidly corrected. The treatment, briefly, consists of the use of corrective plaster splints and, after a few weeks support in such splints, the small foot will usually be molded into a corrected or normal pattern. It is the practice on this service to continue treatment after plaster using a prewalker or clubfoot shoe as an active therapeutic device for two to four months or longer. Usually, as has been stated, in babies and infants under the age of 2 years this will suffice for the correction of the condition.

When the condition is a residual of the more severe equino varus deformity, it may be stubborn in its resistance to correction. On almost any children's orthopedic service in which clubfoot deformities are treated, one may see a fairly high percentage of children who have been under observation and treatment for this situation for several years. In many instances, the treatment for the adducted forefoot has consisted of the use of outer wedges to the soles of shoes, clubfoot shoes which are swung-out in design and have an outer wedge; even in some instances, by the use of repeated encasement in corrective plaster splints. In spite of all this, there may be a disappointingly high percentage of cases that still retain the well recognized deformity.

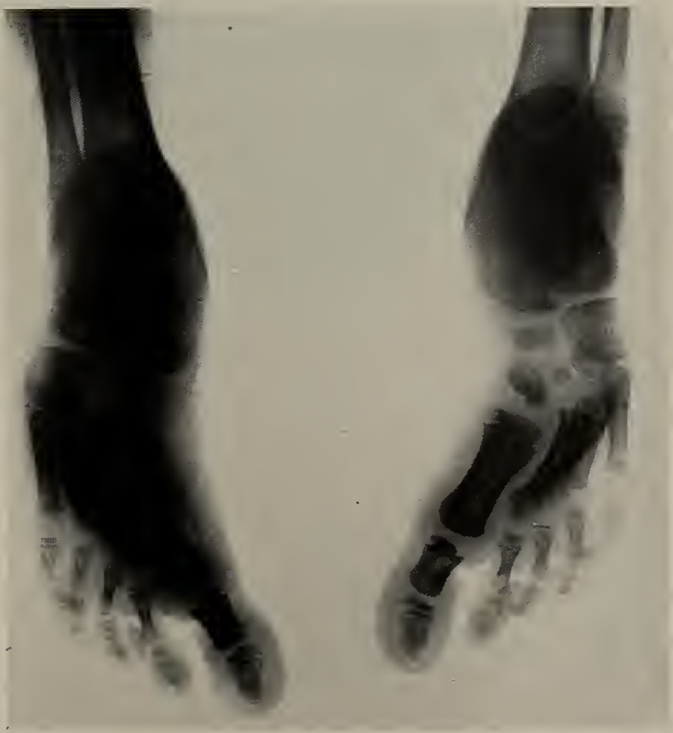

Fig. 1. Before operation.

For more than a two year period on this service—from 1950 to 1952—an attempt was made to correct this condition by means of stapling the proximal epiphyseal line of the first metatarsal on its lateral aspect. This procedure has been recommended as a satisfactory one in correcting the deformity by restricting the growth of the first meta-

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tarsal so that it would swing laterally during the period of active foot growth and thus correct the objectionable medial deviation of this bony component of the forefoot. The results of the stapling operation as observed for this period were disappointing. As a matter of fact, it was given up because in no single instance did any material correction occur even though quite a bit of active bone growth was encountered during that time. Children from 4 to 7 or 8 years of age were operated upon and in no instance was any satisfactory improvement observed.

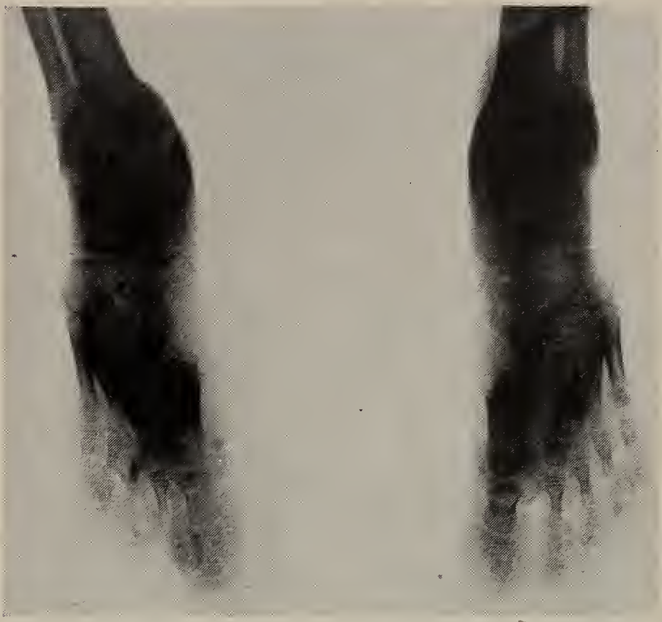

Fig. 2. Postoperative film. The staples have subsequently been removed.

In the fall of 1952, November to be exact, it was decided to do an osteotomy on the first metatarsal in an effort to correct the deformity. Sixteen children have been operated on since then. Ten of them have had an operation done on a single foot only and the other six have had the procedure done on both feet. Preoperative and postoperative x-rays (figures 1 and 2) are exhibited to show the rationale of this treatment. The actual visual clinical improvement is considerably more impressive than are the x-rays. In almost every case the feet present a good appearance of correction after this procedure has been done. The osteotomy has been fixed in a variety of ways; sometimes with screws and sometimes simply by immobilizing the foot in postoperative plaster and, more recently, by the use of a staple fixing the two fragments solidly at the time of the operation.

All of these cases except two have been done on previously treated congenital clubfoot deformities. One child, who has as yet had only one foot operated upon, is a case in which there is marked valgus of the foot and ankle as well as the adducted forefoot and this procedure is being done preliminary to other corrective procedures. Another child, one of a large family, all of whom have badly deformed feet, had adducted forefeet associated with marked pes planus. Both feet were operated on as preliminary treatment for the combined deformities.

The incidence of the deformity of primarily adducted forefoot seems to be increasing, at least in my experience. Prior to the war only an occasional foot of this type was seen on this Service. Since the Service has reopened after the war there has been a steady flow of these patients to the Service and it has been instructive to analyze the situation in regard to the background of the medical referrals. Practically all of the cases of primary adducted forefoot deformity are now referred from communities in which pediatricians are practicing and most of them are referred by the pediatricians. Several nearby communities do not have pediatricians practicing and there have been remarkably few cases of this deformity referred for treatment from them. In that sense, therefore, it would appear that the condition is not increasing but rather that early recognition of it by qualified and interested medical personnel is a determining factor.

In conclusion, therefore, the condition of adducted forefoot is either a primary uncomplicated one or else may be associated with congenital equino varus deformity or other deformities of the foot. The simple primary condition, when it is recognized early, may be treated simply by the use of corrective plasters followed by swung-out shoes and permanent lasting improvement secured. When it is secondary to a congenital clubfoot deformity or associated with another foot deformity, it is more difficult and resistant to manipulative therapy. An osteotomy of the base of the first metatarsal may provide one means of correcting this troublesome residual complication.

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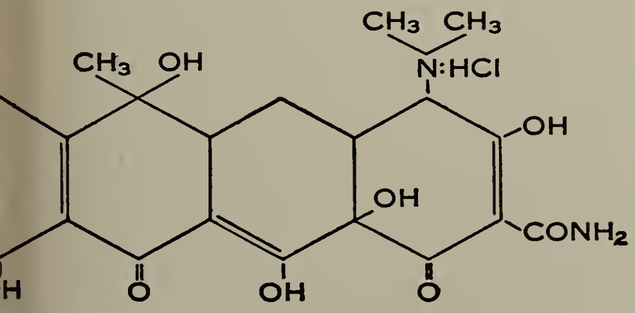
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Cancer of the Skin

Surgical Treatment

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SINCE CANCER of the skin is of such frequent occurrence, it is essential that every physician be familiar with the clinical appearance of these lesions. In Missouri skin cancer far outranks all other types; in a series of 2,318 consecutive cancer patients, 842 (36 per cent) had skin cancer.[1] Approximately 95 per cent of these lesions occur on the exposed portions of the body and, therefore, should be subject to recognition at an early stage of the disease when surgical treatment is a relatively simple office procedure.

CLINICAL PATHOLOGIC CORRELATION

It is a well established fact that cancers of the exposed skin and lips are related to prolonged exposure to sunlight. In Missouri, many patients are from rural populations with a history of chronic exposure to sunlight over a period of many years. All but a minority of the skin cancers in these patients are located on either the neck, face or dorsum of the hands. Preceding the development of frank cancer, these patients show characteristic alterations of the exposed skin (fig. 1). Indeed it is often possible to predict that the characteristic atrophy, pigmentation and shiny appearance of the skin will later be the site of malignant change. Prior to actual malignant change, multiple keratotic plaques may be noted. Considerable clinical experience is necessary to distinguish which keratoses are as yet benign and which have under gone malignant change; it is often impossible to make this distinction on clinical grounds alone. It is important to keep in mind that such keratoses are indicative of an altered skin that is a potential site of cancer formation, and that these patients should be examined at regular intervals. When skin cancer develops in such typically altered skin, the patient should be forewarned of the possible development of other lesions at a later date. Of 1,126 patients with skin cancer followed over a five year period at The Ellis Fischel Cancer Hospital, 425 (38 per cent) developed more than one lesion.[2]

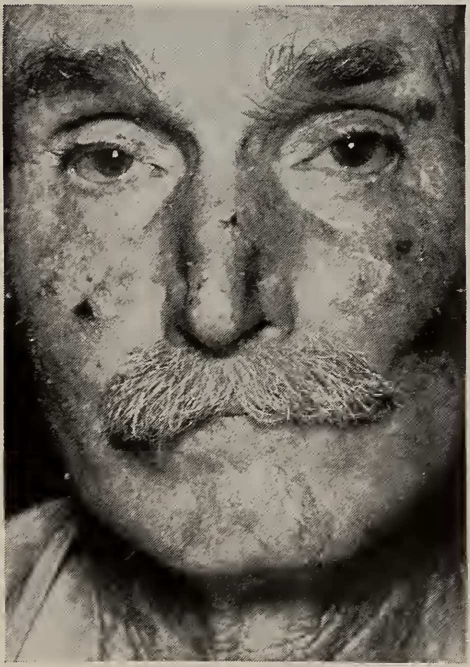

Fig. 1. Typical "Farmer's Skin" illustrating multiple keratoses.

Microscopically, three basic types of skin cancer are recognized and these are listed in the order of their degree of malignancy: melanocarcinoma, epidermoid carcinoma and basal cell carcinoma. Melanocarcinomas are of much less frequent occurrence and will not be considered further here. Basal cell carcinomas arise most frequently in the skin of the central portions of the face and neck, while epidermoid carcinomas occur predominantly in the skin of the ears, temple, cheeks and malar areas. Skin cancers arising on the dorsum of the hands and wrists are also likely to be of the epidermoid type. Fortunately, basal cell carcinoma outranks the epidermoid type three to one in frequency of occurrence. The epidermoid lesions—on the basis of rapidity of growth, recurrence and number of cancer deaths—are approximately three times as malignant as the basal cell type.[3] Lymph node metastases almost never result from basal cell lesions but do occur more frequently than is generally realized in patients with epidermoid carcinomas. Lymph node metastases occurred in fifty-two of 444 epidermoid skin cancers which were followed for a five year period at The Ellis Fischel Cancer Hospital, a metastases rate of 11 per cent. All but ten of the fifty-two primary lesions which exhibited metastases were larger than 2 cm. in diameter, and in thirty of the fifty-two there was a history of previous unsuccessful treatment of the primary lesion.[2] Thus, metastases from epidermoid skin cancer are prone to occur after the lesion has attained a large size or has been inadequately treated.

DIAGNOSIS

With experience, all but a minority of skin cancers can be detected by visual inspection. Exam-

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ination under a good light is important; in fact, many lesions are diagnosed in the unsuspecting patient by careful inspection of the face, neck and hands during the course of a routine examination. The ulcerated, centrally umbilicated large skin cancer is easily recognized, while the small, non-ulcerated lesion is often missed on casual examination. Keratoses of the skin may prove difficult to differentiate from actual carcinoma and, occasionally, lesions which present the appearance of inflammation may prove to be malignant on biopsy.

Although the majority of skin cancers can be diagnosed at a glance, the practice of treatment without histologic confirmation is to be deplored. Torrey, in a study of more than 4,000 skin biopsies, found that 15 per cent of the lesions diagnosed as benign were actually malignant.[4] Since epidermoid carcinomas may later exhibit lymph node metastases, patients with this type of cancer should be examined at regular intervals for evidence of lymph node enlargement. The preliminary histologic differentiation of the primary lesion is thus of practical value. If treatment of the primary tumor by irradiation is planned, or if a radical surgical procedure is necessary, preliminary biopsy should always be done. This entails time and expense and, for this reason, it is often omitted. If recurrence develops following treatment, the appearance of the recurrent lesion often differs markedly from that of the original lesion, and reference to the initial histologic diagnosis may be of value in the determination of further treatment.

Preliminary biopsy of small lesions situated at locations where complete excision of the entire lesion can be accomplished is unnecessary. Such lesions can be excised widely with a clinical diagnosis of malignancy and the excised specimen examined histologically, not only for confirmation of the diagnosis but also for evidence of adequacy of excision.

TREATMENT OF THE PRIMARY LESION

In the determination of treatment of a given patient with cancer of the skin, the initial decision is concerned with whether the patient should be treated by surgical or irradiation means. Both are highly successful in the treatment of epidermoid and basal cell skin cancers. Treatment by either method should be determined on an individual basis, and the location and the size of the lesion are major factors in this determination. The surgical excision of lesions of the forehead, temple, cheek and neck usually can be accomplished quickly with a satisfactory esthetic and functional result (fig. 2). Conversely, excision of a much smaller lesion located on the eyelids, nose or lips frequently results in serious esthetic and functional deformity. There can be little argument that skillful external roentgentherapy is far superior to surgical excision and plastic repair of all but the smallest lesions in such locations. Surgical excision has definite advantages over irradiation in the treatment of most lesions of the unexposed portions of the body. Here esthetic considerations are less important, and little functional impairment follows excision of even larger lesions, particularly if immediate repair of the defect is accomplished. Surgical excision is also superior to irradiation in the management of most lesions of the dorsum of the hands. The normal function of the hand demands an elastic, pliable skin on its dorsal surface, a condition seldom the result of irradiation of an already atrophic epidermis. Previous unsuccessful treatment by irradiation is an indication for treatment by wide surgical excision. Also, surgical excision should be employed whenever bone involvement by tumor can be demonstrated, usually by radiographic means. Cure by irradiation of such involved bone is unlikely; however, the mere proximity of the lesion to cartilage (as in lesions of the external ear) is not necessarily a contraindication to treatment by means of external roentgentherapy. Superior results often follow skillful treatment by irradiation of lesions situated over the alar cartilages of the nose and the cartilage of the external ear. In patients with diffuse skin changes secondary to chronic exposure to sunlight, and where multiple keratoses have been followed by frequent skin cancers, prophylactic excision and resurfacing with a split-thickness skin graft occasionally has been done.

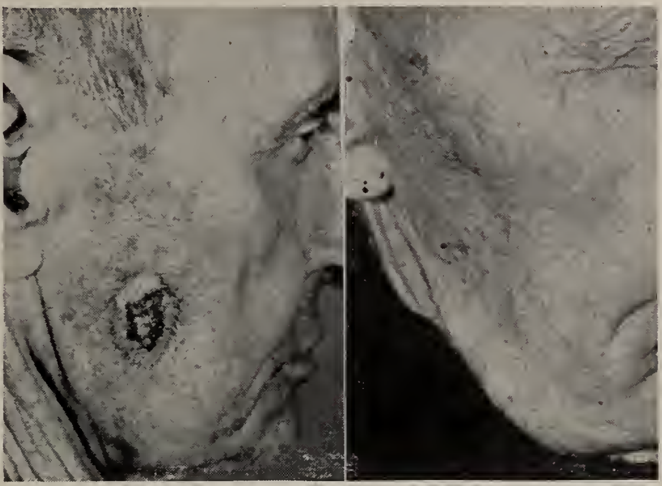

Fig. 2. Epidermoid carcinoma of Cheek before and after surgical excision and primary closure by suture.

TECHNIC OF SURGICAL TREATMENT

Several different methods are available for surgical treatment of cancer of the skin. Among these are the destruction of the primary lesion by the actual cautery, by electro-coagulation and excision by the use of surgical diathermy. All of these methods result in healing of the defect by secondary intention. New[6] has stated that the use of surgical diathermy will remove the lesion with a better chance of no recurrence than any other method that he knows of, and with less deformity. He states that this is particularly true of lesions over the nose, eyelid, inner canthus, ears, or forehead, and where there is cartilage or bone directly under the skin.

In my opinion, the use of surgical diathermy and the cautery are rarely necessary in the treatment of cancer of the skin. Preference should be given to wide excision with the scalpel, after which immediate repair of the defect usually can be accomplished by simple suture or by full-thickness or split-thickness skin graft. If an adequate margin is allowed both in width and depth, the use of the cautery or surgical diathermy would seem to have little or no theoretic superiority. If tumor cells exist at the margins of the excision, it is doubtful if cauterization of a few more cells will materially aid in the permanent control of the lesion. Scalpel excision, on the other hand, has the advantage of permitting histologic examination of the specimen for determination of adequacy of excision, as well as for the histologic diagnosis. If cautery or diathermy have been used, varying amounts of the margin of the specimen are destroyed beyond such examination. Most important, the use of diathermy or cauterization precludes immediate repair of the defect, whereas such repair can be accomplished safely in the majority of patients following scalpel excision. If is unnecessary to await healing by secondary intention to perform later plastic repair, as advocated by New.

Many skin cancers are suitable for surgical excision in the physician's office, provided that attention is given to proper surgical technic. For esthetic reasons, there is a tendency to temporize in the initial treatment of skin cancers about the face, and this is particularly true of lesions near the eyes, nose or lips. It is good practice to outline the extent of the excision with methylene blue (or other suitable skin dye) as a preliminary to the actual excision, thus providing a better estimate of adequacy of the excision and the possibility of deformity. One per cent procaine injected locally around the margin of the lesion provides adequate anesthesia, and the use of a 30 gauge needle on a dental syringe is appreciated by the patient. As a rule, the margins of the lesion are well defined, but it is good practice to allow a 0.7 cm. to 1.0 cm. margin of normal skin at all points around the tumor. Attention should be given, also, to adequacy of excision beneath the tumor, for it is here that many failures of excision occur. Bleeding is best controlled by the use of mosquito forceps, with 5-0 white silk or cotton ligatures. Closure usually can be effected by the use of individual sutures, using 5-0 black silk or cotton on extremely fine, curved cutting needles, placed at 1 mm. to 2 mm. intervals and approximately 1 mm. from the edge of the incision. It is emphasized that the appearance of the scar is directly proportional to the attention given to details of technic and that there is no place for gross, hurried or carniverous surgical technic. A small pressure dressing, using adhesive tape or Elastoplast adhesive is advisable for the first two days. In most cases sutures can be removed with small pointed scissors four to five days after the excision.

Large lesions of the forehead, temple, cheek, neck and the dorsum of the hands often cannot be excised in the office because of the necessity of closure by means of skin grafting. Such patients are best treated in the hospital, with excision much as outlined for the smaller lesions, but with immediate repair by means of either full-thickness or split-thickness grafting (fig. 3). Lesions of the external ear are often amenable to wedge excision of the full thickness of the ear on both sides of the tumor, with careful closure of the skin on the anterior and posterior surfaces of the ear. Although this reduces the size of the ear, the deformity is not readily apparent (fig. 4).

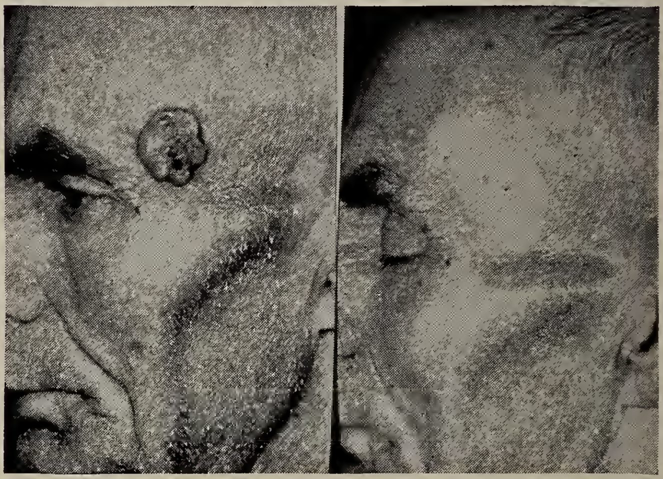

Fig. 3. Large basal cell carcinoma of temple before and after surgical excision with immediate repair by skin graft.

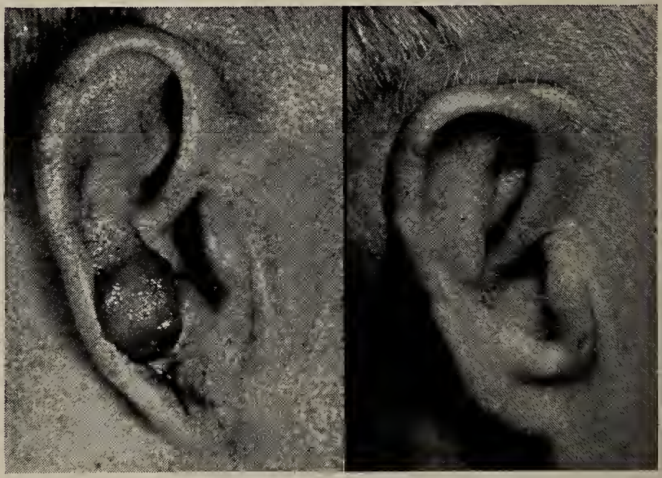

Fig. 4. Illustrating appearance of ear before and after wedge excision.

LYMPH NODE METASTASES

Early, or so-called prophylactic, node dissections are not indicated in epidermoid skin cancer because of the low incidence of metastases. As is true with most types of cancer, however, once lymph node metastases result, the outlook for permanent cure is poor. Metastases occurred in fifty-two, or 11 per cent, of 444 epidermoid lesions at The Ellis Fischel Cancer Hospital,[2] and Schrek found metastases in 16 per cent of 197 similar lesions.[5] Twenty-four of the group of fifty-two with lymph node metastases seen at The Ellis Fischel Cancer Hospital were considered suitable for regional lymph node dissection. Of these, only five remained cured at the end of five years. The best chance of control follows en bloc regional lymph node dissection. However, the outlook is considerably enhanced by early diagnosis of the metastases. This can be accomplished only by careful examination of the regional lymph nodes at regular intervals, a procedure that is often omitted because it is inconvenient to either the patient or the physician.

RESULTS

The prognosis for properly treated cancer of the skin is excellent, but there are surprisingly few reports of well followed series in the literature. All too often primary healing following treatment has been accepted as the criterion of cure. Of 842 patients with skin cancer (exclusive of melanocarcinoma) followed for at least five years at The Ellis Fischel Cancer Hospital, less than 10 per cent died of cancer. Since the majority of these patients were in the older age groups, death from intercurrent disease was an important factor, 25 per cent of the group of 842 patients dying of the ravages of old age. Despite the fact that cancer of the skin is relatively innocuous compared with other types of cancer, it is to be emphasized that these lesions, particularly the epidermoid cancers, can be lethal. Of 303 patients treated for epidermoid cancer of the skin at The Ellis Fischel Cancer Hospital, 59 (22 per cent) died of cancer. Since many of these patients presented advanced lesions with a history of previous unsuccessful treatment, the ratio of one death per five patients is undoubtedly an unfair estimate of the malignant potentialities of this type of cancer. Nevertheless, it does serve to emphasize that the treatment of these lesions is not a casual undertaking. This figure also underscores the necessity of early diagnosis of a lesion which is nearly 100 per cent curable in its early stages.

The outlook for permanent cure of basal cell carcinoma is much better than in the epidermoid group. Only seventeen, or 2 per cent, of a group of 808 patients with basal cell carcinomas followed for a five year period at The Ellis Fischel Cancer Hospital died of disease.[2] The contrast in cure rates when compared with the epidermoid group is striking since the local recurrence rate after initial treatment of basal cell carcinomas was found to be 11 per cent, or almost equal to the recurrence rate of 13 per cent following treatment of epidermoid carcinoma. The difference in deaths due to cancer between the two groups is explained by the fact that 107 of 123 recurrences following initial treatment of basal cell carcinoma were subsequently controlled by further treatment. Provided that patients are carefully followed for evidence of recurrence following initial treatment, secondary treatment is successful in the majority of cases.

Professional Building.

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Cardiac Arrest and Resuscitation

Present Status
From a Registry of Over 1400 Cases

HUGH E. STEPHENSON, JR., M.D., *Columbia, Mo.*

MORE THAN FIFTY YEARS have now passed since the first attempts were made to resuscitate the acutely arrested heart by artificially maintaining the circulation in the hope that spontaneous cardiac output could be reestablished. Iglesrud, in 1901, and Starling and Lane, in 1902, were first able to report success with such a method. The possibility of successfully reviving a patient whose heart action suddenly ceased has attracted the imagination of physicians for several centuries. With the advent of anesthesia and the report of the first case of cardiac arrest under anesthesia shortly to follow, in 1848, however, the urgency of preventing or of treating sudden failure of the cardiac conduction mechanism became more apparent. With the advent of thoracic surgery and more recently cardiovascular surgery, a better knowledge of the pharmacology of the heart and an increasing understanding of the conduction mechanisms of the heart, the tempo of activity surrounding cardiac arrest and resuscitation has increased many fold.

It is, therefore, appropriate that the intent of this paper be for the purpose of presenting the current status of attempts at cardiac resuscitation. The conclusions are drawn from a registry of more than 1,400 cases which have been sent from physicians in all parts of this country and many foreign lands. Fifty-nine of these cases have been experienced personally. Almost two years of animal laboratory work on cardiac arrest has contributed to these conclusions.

HOW FREQUENT IS CARDIAC ARREST?

In summarizing the available data which has been collected from many sources, one must conclude that cardiac arrest may be expected at least once in every 1,500 to 2,500 operations.[1] This conclusion is obtained from hospitals of all sizes, including the large teaching hospitals as well as the small private hospital. It is likely, in 1954, that between 6,000 to 8,000 patients will die of a sudden cardiac arrest in which a reversible or resuscitative success might have been achieved. Relatively, cardiac arrest may be experienced rarely by the average physician. Yet, the suddenness with which the physician may be called upon to face the realities of cardiac arrest and resuscitation are such that an attitude of indifference is hardly appropriate. It is seldom likely that a surgeon's personal observations and experience will have been adequate to allow him to take full advantage of the golden opportunity to restore the normal heart beat. Instead he must take full advantage of accumulated data from the experience of others and should avail himself of practice sessions in the animal laboratory.

Their Hearts Ceased to Beat—
But Cardiac Massage Came to Rescue
Rare Heart Surgery Revives Man Dead for 13 Minutes
MINISTER'S EXPERIENCE
He Knows H
It Feels to D
PASTOR'S RECOVERY
83, He Dies' Twice During Surgery; It's Beer He Wants
Heart Stopped 26 Minutes In Operation, but He's Okay
HEART
DIAPHRAGM
Death Makes 2d, and Final, Visit to Alan Curtis of Films
Woman Who 'Died' In Childbirth Going Home With Healthy Baby
Woul
To South America

DIAGNOSIS

If there is suddenly an absent blood pressure and an absent pulse, one must assume, in the usual instance, that the output of the heart is inadequate to maintain life. This is the rule of thumb which we believe will best guide the physician to the successful cardiac resuscitation. The burden of proof would rest with those who would say that under such a circumstance cardiac output is adequate.

Cardiac arrest should be one of the simplest and most rapidly made diagnoses. There have been three or four instances in more than 1,400 cases in which a thoracotomy was performed, and

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This investigation was supported in part by a Research Grant from the National Heart Institute of the National Institutes of Health, United States Public Health Service.

From the Department of Surgery, University of Missouri School of Medicine, Columbia, Missouri.

the heart was found to still be feebly beating. All of these cases subsequently survived. Unless the thoracotomy is regarded as a diagnostic procedure, however, in those cases in which all evidence points toward an absent cardiac output, then the survival rate will be discouragingly low. If one depends upon the clinical manifestations of anoxemia, as indicated by cyanosis, particularly of the lips, globules of the ear and the face, then one may occasionally fail to note severe signs of anoxemia which do not appear clinically in this fashion—such as in patients with a severe anemia whose hemoglobin is less than 45 per cent. The survival rate in the dark-skinned or Negro patient is almost one half as favorable as that of the lighter skinned individual. It is imperative that the anesthetist be aware of the blood pressure or pulse of the patient at all times.

As pointed out in a previous publication, the crux of the whole aspect of survival in cardiac arrest revolves around the time factor. In the first 1,200 cases studied, 94 per cent of all of the successful cases were those in which cardiac massage had been begun before a period of four minutes had elapsed. Since this is essentially a three to four minute emergency, it should be stressed that diagnosis and subsequent treatment almost always rests with that physician nearest at hand; to seek more qualified assistance before initiating the resuscitation procedure is to jeopardize the patient's chance for a permanent recovery.

THE INDICATIONS FOR CARDIAC RESUSCITATION

When should attempts at cardiac resuscitation be made? Unless this question can be answered satisfactorily by the physician it is unlikely that, should he encounter a case, he would be prepared to move with a degree of resoluteness and speed necessary for a successful resuscitation. In general, it can be stated that unless one is positive that the cerebral cortex has been without oxygen for a period of more than four to six minutes (with an irreversible situation most likely to be present), then one is obligated to correct the circulatory failure by the maintenance of artificial circulation, either by means of cardiac compression or in some rare instances by the use of the cardiac electrical pacemaker. It goes almost without saying that cardiac resuscitation should be attempted only in those cases in which at least a reasonable chance of success would seem likely. In many instances cardiac resuscitation has been attempted on the chronically ill cardiac case or in other patients with disease of a terminal nature.

About 85 per cent of all cardiac arrests will be encountered in the operating room or in the anesthesia induction room. The cases will stand the greatest chance at successful resuscitation because of a more rapid recognition of the situation and because of the availability of adequate equipment and personnel. The indications for cardiac resuscitation have, however, expanded outside of the operating room, and a large number of successful cases are appearing under what would at first seem quite adverse conditions. We recently received a report from a physician having done a thoracotomy on a 4 year old girl in his office in which he had been performing a tonsillectomy under vinethene and ether. Cardiac massage was successful in restoring spontaneous cardiac contractions and the child made an uneventful recovery after a few subsequent days in the hospital. There was no infection following the chest operation in spite of using an unsterile knife and in spite of the chest not having been prepared for the thoracotomy.

In anticipating the inevitable case of cardiac arrest, it is imperative that the hospital and the physician have a prepared plan of action. Such a plan of action must be flexible enough to allow successful management of a case regardless of where it occurs in the hospital. These may include particularly the patient's room, the elevator, the x-ray department during diagnostic procedures, the outpatient clinic, the emergency room, the admitting room or on the medical ward.

Unless the average physician is closely following the advances that have been made in the field of cardiac arrest and resuscitation, then he may be surprised at the wide scope of potentialities that arise. The wide diversity of attention to this problem can be attested to by our bibliography of more than 1,400 related references. Dinsmore, as President of the American Surgical Association, recently reviewed the advances in surgery within the past decade; among them, significantly, were those in the field of cardiac arrest and resuscitation. It is generally agreed that cardiac arrest is actually one of the most frequent and severe of the major complications which result in death on the operating table. Great advances have been made in the past century since the advent of anesthesia in order to make surgery increasingly safe; but unfortunately, cardiac arrest has continued to plague the operating room, and some of the new frontiers in surgery must await a more basic understanding of the sudden failure of the cardiac conduction mechanism before these frontiers can be advanced further. Surgery under conditions of hypothermia has opened a promising chapter in cardiac surgery. Hypothermia, however, is associated with a high frequency of ventricular fibrillation and, until this complication can be successfully prevented, certain aspects of cardiac surgery will be impeded.

Air emboli, either on the right or on the left side of the heart, have in the past been associated with a high rate of mortality. It has now been learned, however, to treat successfully many cases in which air in pathologic quantities has accidentally entered into either the venous or arterial circulation. In following procedures as applied in other phases of cardiac resuscitation, these patients can be salvaged.

In the realm of sudden death from severe anaphylactic reactions as with penicillin, cocaine or other agents, instances of successful resuscitation are being reported with increasing frequency. If attempts to maintain cerebral and coronary circulation are carried out for that period of time until the anaphylactic response is over, then many of these patients can be resuscitated permanently.

Accidental electrocution or drowning can be offered greater hope than formally because of knowledge gained in the field of cardiac arrest and resuscitation. Ventricular fibrillation thought to be irreversible up until less than a decade ago, now carries with it a high rate of survival. Nearly 60 per cent of more than 150 hearts in verticular fibrillation from this registry have been defibrillated. The survival rate has approximated cardiac asystole. It is likely that one may expect additional hope in the future of a patient with various forms of heart block. Patients with exsanguinating hemorrhage often can be maintained by cardiac massage until adequate blood replacement is achieved.[2]

THE ETIOLOGY OF CARDIAC ARREST

Anoxia for many years has been regarded as the primary cause of cardiac arrest and was accepted with little question by the majority of anesthesiologists and physicians—with little effort to understand the mechanism of its effect. The role of anoxia in the production of cardiac arrest needs be reexamined however, when one recalls that in instances of suffocation and strangulation, the heart does not stop in sudden arrest but instead maintains first a rapid increase in rate for a period of time and then if the anoxia persists gradual slowing of the heart will occur with finally complete stoppage of the heart.[3] Reid has particularly stressed these aspects. Cardiac arrest refers to a sudden acute stoppage of the heart, and this cannot be produced in the experimental animal with anoxia. Contractions originating in the ventricles of dogs deprived of oxygen have been noted for as long as fifty-three minutes. Hearts completely removed from the animal may be seen to beat for as long as ten to fifteen minutes.

It is true that anoxia may play a predisposing part, however, for it is known that oxygenation is essential for enzymatic destruction of all drugs and anesthetic agents; therefore, in its absence they have their depressant action prolonged. As Reid points out, "Anoxia *per se* does not cause sudden failure of the heart. The heart eventually fails because the common myocardium does not respond to stimuli received from the specific tissue." Cardiac arrest is exceedingly rare in asphyxia of the newborn.

There are no vagal fibers in the human ventricle, the vagus innervation being restricted to the auricles. Under normal conditions, regardless of periods of reflex inhibition of the auricles, the ventricles are able to originate a contraction spontaneously. The ventricular specific tissue, indistinguishable anatomically in the ventricle, has this unique physiologic feature of being capable of initiating stimuli independently. It is not surprising that on going over the more than 1,400 cases of cardiac arrest one sees such a high incidence of sudden cardiac standstill occurring immediately following a probably reflex action on the heart. If there is disease of specific tissue and vagal stimulation depresses stimulus formation in the auricles, sudden and complete stoppage of cardiac contractions may occur. As Reid states, "A heart under anesthesia is as vulnerable to vagal stimulation as a heart with diffuse organic lesions would be without anesthesia." A probable vago-vagal reflex action was found likely in approximately one fourth of all cases studied. These included instances in which the arrest occurred immediately after the insertion of the endotracheal tube, during tracheal suction through the endotracheal tube, at the time of extubation, at the exact time of cutting the vagus nerve in the chest, during dissection about the hilus of the lung, during downward traction on the stomach, during bronchoscopy at the end of operation, traction on the mesentery, while stripping the periosteum, during postitional chances of the patient, during passage of the esophagoscope and even during the passage of a levine tube. Several cases have been reported in which cardiac arrest occurred on subsequent occasions following the repetition of an identical stimulus such as during the insertion of the endotracheal tube.

THE PROCEDURE OF RESUSCITATION

A summary of the current status of the actual resuscitative procedure, while avoiding unnecessary details, attempts to call attention to those features which need special emphasis and to likely pitfalls and complications which may be avoided.[4]

(a) *How does one insure proper pulmonary oxygenation in the optimal manner?*—Ideally a positive-negative pressure pulmonary resuscitator is desired. If the patient is in the operating room, intermittent pressure on the anesthetic bag will be sufficient in most cases. An endotracheal tube should be passed as soon as possible, but, in the meantime, a simple face mask will suffice. One hundred per cent oxygen is employed in all cases with little justification for the use of carbon dioxide mixtures or a mixture of helium and oxygen.

Should cardiac arrest occur outside of the operating room, as it not infrequently does, the problem of pulmonary resuscitation becomes more acute. When possible, mouth-to-mouth breathing is a satisfactory adjunct, particularly in the younger age group and infant. Mouth-to-mouth breathing used since the time of the "New Testament" can be a life saving measure. Care must be taken to see that the airway is unobstructed in its entire course, particularly in the region of the pharynx where the tongue may have fallen in a backward position against the pharynx. When the chest is opened, one is able to visualize the degree of efficiency employed in expanding the alveoli. If the left lung is not expanding and contracting in a noticeable fashion, then one can assume that the airway is obstructed or that the pressures being exerted against the alveoli are not sufficiently high.

(b) *The incision.*—In spite of the attention that cardiac arrest has received in recent years, it is surprising to note inadequacies in the approach to the heart. I have seen thoracotomies attempted in which it was barely possible to insert two fingers into the chest cavity. Frequently the incision is made too far medially and not far enough laterally. If made too far medially, the internal mammary artery may be severed and, following resuscitation, bleeding from this vessel may not be noted and exsanguination will occur. This has happened in at least four cases brought to my attention.

In our hands, the ideal incision is one made just below the nipple on the left side (which is usually in the fourth left anterior interspace). The chest can be opened quickly and time need not be taken to cut costal cartilages, remove a rib, or insert a rib spreader, all of which add vital seconds at a point when irreversible cerebral cortical damage can occur (fig. 1).

Although the abdominal approach is still used in some isolated instances, it would seem, however, to lack many of the advantages offered by the transthoracic route. The latter is not only a rapid and easily accessible approach allowing direct visualization of the heart and a quick evaluation of the heart's activity, but it allows a more efficient method of cardiac massage, a more accurate means of injection of drugs into the heart and facilitates the application of the electrodes in ventricular fibrillation. Shunting more blood into the cerebral or coronary circulation by manually clamping the arch of the aorta beyond the great vessels introduces another advantage.

(c) *How fast should one massage the heart?*—Cardiac massage, which is actually intermittent cardiac compression, should be carried out at a rate enabling one to maintain a blood pressure of between 60 and 80 millimeters of mercury and a palpable pulse in the vessels of the extremities. It is our opinion that the more rapid rate of between 60 to 80 per minute is the most successful. Some prefer a slower rate of between 30 and 50, feeling that it is less traumatic and that there is some advantage in allowing the heart to refill. Laboratory work on dogs has convinced us further of the efficacy of the more rapid intermittent compression of the heart.

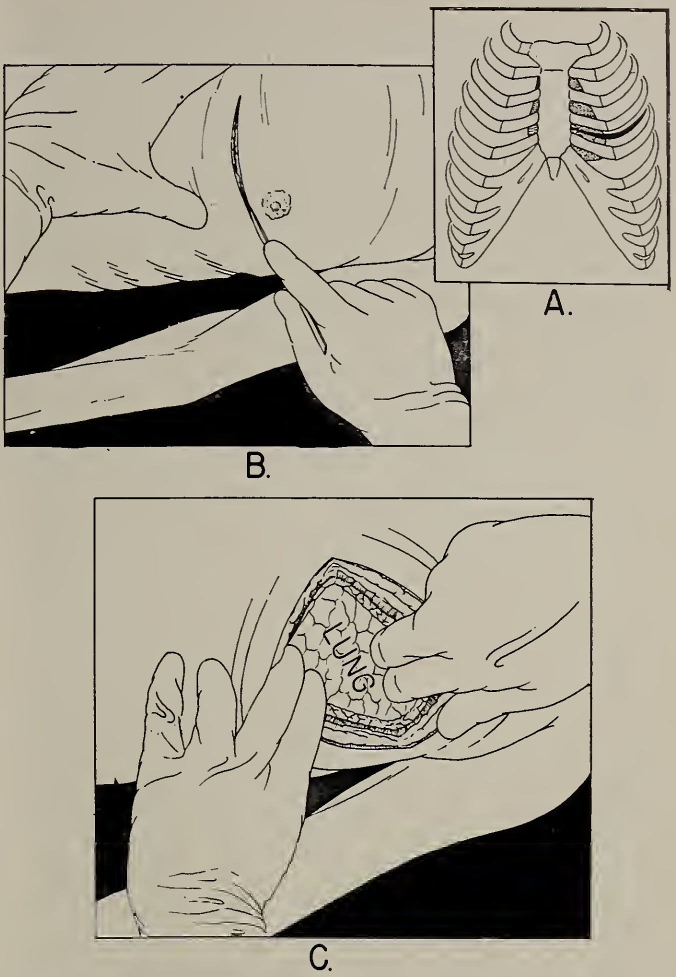

Fig. 1. A. The position of the skin incision in relation to the bony thorax and heart . . . which will allow adequate exposure for massage. B. The skin incision shown here will be carried laterally. One need not take time to count the interspace level, but may make the incision just below the nipple in the male or at the level of the lower breast line in the female. C. Adequate exposure can be carried out by simply spreading the rib cage between the operator's two hands. The left hand and wrist can easily be inserted without the use of a rib spreader. The costal cartilage need not be cut but in spreading the ribs one of the adjacent ribs or cartilages may be fractured.

The best answer to this question seems to rest with the individual. The test of adequate massage is adequate oxygenation as suggested by contracted pupils, pink color of skin and peripheral pulsations. Only by practice can one become proficient at massage and it is urged that practice in the animal laboratory or on a model be performed.

(d) *Should the pericardium be opened?*—Once the thoracotomy has been performed and the interspace spread by means of the operator's hands allowing insertion of the left hand into the chest, the condition of the heart is determined as quickly as possible. In the usual case one can visualize the myocardium through the intact pericardium and is able to tell whether ventricular fibrillation or cardiac standstill is present. In either case, manual cardiac intermittent compression is necessary and should be begun at once in order to avoid irreversible brain damage. If, after a period of cardiac massage, spontaneous rhythm does not occur and one cannot determine the presence of ventricular fibrillation by palpation, then it may be necessary to open the pericardial sac and more closely examine the activity of the myocardium of the ventricles. In the majority of cases the pericardium need not be incised. The lubricating effect of the pericardial fluid tends to prevent excessive trauma from cardiac massage and the instance of rupture of the myocardium is less if the pericardium is allowed to remain intact. In addition, opening the pericardium entails an unnecessary delay, adds increased technical difficulty, presents complications from inadequate closure; and in general, we are of the opinion that cardiac compression can be carried out in a more adequate fashion if the pericardial sac is not opened. Should ventricular fibrillation be present, however, it is best to open the pericardium and apply the electrodes directly against the myocardium. In a rare instance, the diaphragmatic attachment of the pericardial sac will make it necessary for an incision of the pericardium.

(e) *Ventricular fibrillation.*—Cardiac arrest, of course, refers either to complete cardiac standstill due to asystole or to ventricular fibrillation. It is important to differentiate between the two. Approximately 15 per cent or more of all cases of cardiac arrest consist of those in which ventricular fibrillation is present. To the inexperienced observer the two conditions are not always so easily differentiated, particularly if the fibrillation is of a weak or feeble nature. Typically, ventricular fibrillation will be seen as an incoordinated movement of the ventricles unassociated with any degree of cardiac output and resembling, as someone has described it, "a bag of worms." Regardless of which of the two conditions is found to be present, massage of the heart should begin at once.

Although ventricular fibrillation has been successfully treated only within the last decade, results at the present time are sufficiently encouraging to warrant a great deal of optimism. Ventricular fibrillation is best treated by means of electric countershock applied by two metal electrodes on each side of the heart to which a voltage of between 110 and 150 volts is generally required. Depending upon the resistance of the heart, one would usually find that a current of 1.5 to 2.5 amperes is sufficient (fig. 2). Electrical cardiac defibrillators are, at present, available on the market through a multitude of sources (fig. 3).

Almost every heart can be defibrillated and in difficult cases we have found it valuable to precede the defibrillation attempt by the injection of 0.5 cc. of 1:1000 epinephrine. Here again, it is urged that defibrillation be practiced in the laboratory. The occurrence of cardiac arrest and ventricular fibrillation provides a poor opportunity for introducing oneself to the procedure of resuscitation—as the statistics from our cardiac arrest registry sadly attest.

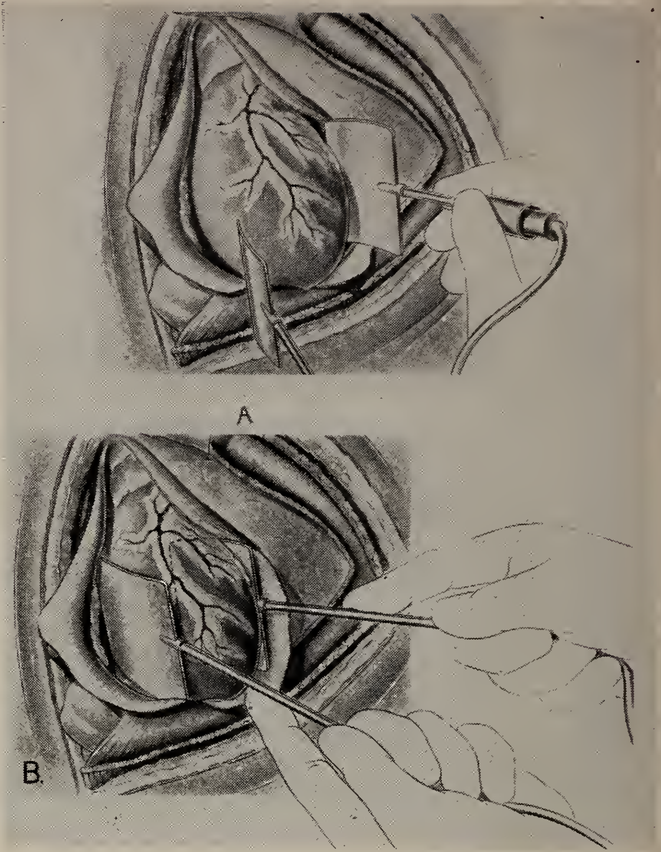

Fig. 2. A and B illustrate the relative positions of the metal electrodes in relation to the myocardium and pericardium. The handles are insulated and an isolation transformer should be incorporated in the defibrillator as an added safety measure.

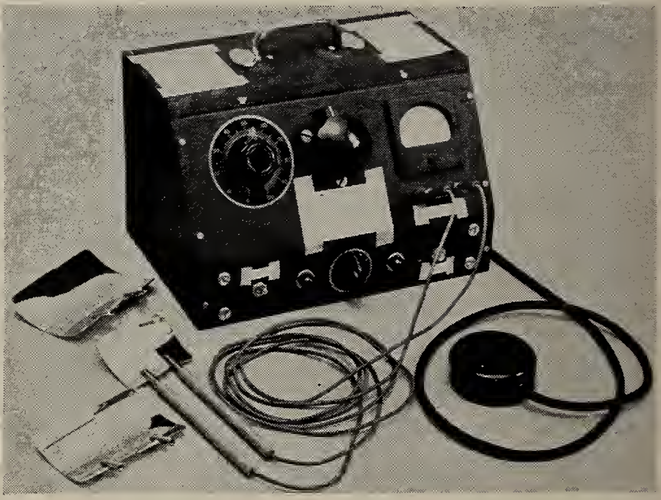

Fig. 3. The cardiac electrical defibrillator. Note the varying sized electrodes to fit different size hearts. Current can be controlled by means of the foot switch or by the hand button.

(f) *The pharmacology of cardiac resuscitation.*—All too frequently drugs are used indiscriminately in cases of cardiac arrest. In the usual case of cardiac arrest no intracardiac injection of any type is needed since only the manual massage of the heart is necessary before a forceful and regular rhythm returns. Inadequate knowledge of the pharmacology of cardiac resuscitation has resulted in a number of complications and misunderstandings.

We do not believe that there is a rational place for the practice of injecting drugs through the intact chest wall into the heart in cases of cardiac arrest. Such a procedure uses up valuable time, does not differentiate between the presence of asystole and ventricular fibrillation, may actually produce ventricular fibrillation if not present and, only in a rare instance, will the mechanical stimulus on the epicardium, pericardium or myocardium be such as to restore a spontaneous contraction. Likewise, there is no place in the resuscitative procedure for such drugs as coramine, caffeine or metrazol.

If the tone of the myocardium remains flacid after a period of two to four minutes of massage, then one may inject into the lumen of the left ventricle a dose of epinephrine which will range between 0.4 to 0.6 cc. of 1:1000 solution. Following a minute or so of intermittent cardiac compressions, one will note a pharmacologic effect on the myocardium as manifested by a feeling of increased tone.

Epinephrine may be repeated several times without ill effect. Procaine has fallen into partial disrepute and is seldom used. This is chiefly due to its action in decreasing the apparent contractility and tone of the myocardium at a time when more is needed. Procaine hydrochloride has been used in the past in asystole at the same time as epinephrine in order to diminish the chances of ventricular fibrillation occurring. It also has been widely used in treating fibrillation and successfully so, in some instances. We have found that the heart is more difficult to defibrillate after procaine and we are not fearful of asystole progressing to fibrillation as the latter can be treated just as effectively.

A 10 per cent solution of calcium chloride or a 2 per cent solution of barium chloride in doses of 2 to 5 cc. have been found particularly effective in improving the tone of the myocardium in certain cases in which an adequate response to epinephrine was not achieved.[5] We have had more success with barium chloride than with calcium chloride. Toxic doses of these drugs can be given relatively easily.

Once the heart resumes its normal contractions, it should be observed for several minutes before the chest is closed. Routinely instill 2 grams of streptomycin and 600,000 units of penicillin are instilled into the chest before closure and, if the pericardium has been opened, the pericardial sac is approximated with only an occasional suture. Too tight closure may result in a collection of fluid within the sac and a tampanode effect. Too loose a closure has resulted in a herniation of a part of the heart in at least three cases.

The chest is closed in a routine fashion, and it is generally wise to establish an underwater drainage system in order to allow for reexpansion of the lung and for adequate drainage.

In the usual case the respiratory center will resume spontaneous activity within a matter of minutes after the heart action has resumed. In some cases there may be a delay of twenty to thirty minutes before this takes place, however.

(g) *Management of complications.*—Rupture of the heart during massage has occurred in nine cases in our registry. This is the most drastic of complications likely to be encountered although they may include laceration of the lung, injury to adjacent structures, infection, lower nephron nephrosis, burns of myocardium and such post-resuscitative sequelae as severe neurologic ones which are discussed in a subsequent section.

The management of these complications has been dealt with in some detail in a separate publication.

(h) *The cardiac electrical pacemaker.*—In discussing the current status of cardiac resuscitation some mention should be made of the cardiac pacemaker. Maintenance of cardiac contractions by the application of electrical currents has been possible for many years. Recently several improved types of pacemakers have been developed which do not require a thoracotomy, and enthusiastic speculation has arisen about their use. A recent report from the Massachusetts General Hospital states that, at the present time, electrical pacemakers cannot be used rationally without an electrocardiographic diagnosis or direct visualization of the heart.[6] Since between 10 and 25 per cent of all cases are associated with ventricular fibrillation, it is to abandon automatically this group with the electrical pacemaker as applied in all cases of cardiac arrest. Unfortunately the direct writer electrocardiogram cannot be attached and ready for reading in a period of time compatible with reversible changes should attempts at resuscitation be carried out.

WHAT EQUIPMENT IS NEEDED?

Immediate availability is the key consideration regarding equipment necessary for cardiac resuscitation. Most of this equipment is simple, inexpensive and provides little excuse for its absence, regardless of the location of the arrest.

All too often a simple scalpel is not on hand. (We suggest that the doctor carry a pocket knife!) Any plan of action for this emergency must provide for the equipment being moved rapidly from one room to another.

Realizing that a sizeable per cent of cases occur outside the operating room, a Mobile Cardiac Resuscitation Unit was designed. For the last three years this unit has been used in Bellevue Hospital in New York City and has seen service, besides in the operating room, on the wards, in the x-ray rooms, admitting office, emergency ward and on medical floors (fig. 4).

Such a unit is designed to avoid all the possible delays likely to be encountered and which are responsible for the cases of permanent neurologic damage or death due to a period of complete anoxia of more than four minutes. The unit is equipped with a positive-negative pulmonary resuscitator whose pressures can be adjusted for the infant or adult lung; oxygen tanks; tracheal suction apparatus; all necessary instruments such as scalpels, several forceps and scissors (kept in sterile solution tray); interval time clocks which ring at two and three minute intervals to allow one to know how much time is elapsing; built-in electric cardiac defibrillator with varying sized, curved metal electrodes to fit any size heart; intravenous standards; syringes with adrenalin, 1:1000; dark-colored bottles containing barium chloride (2 per cent) and calcium chloride (10 per cent); Levophed; heparin; endotracheal tubes; airways; direct writer electrocardiograph machine for immediate readings if necessary; electrophrenic stimulator; intra-arterial transfusion set-up; face masks, and special drawer for pediatric resuscitation equipment. (It is not generally realized, but, according to our registry, cardiac arrest is more common in the child than in any other decade of life. More than 21 per cent occur during this first decade.)

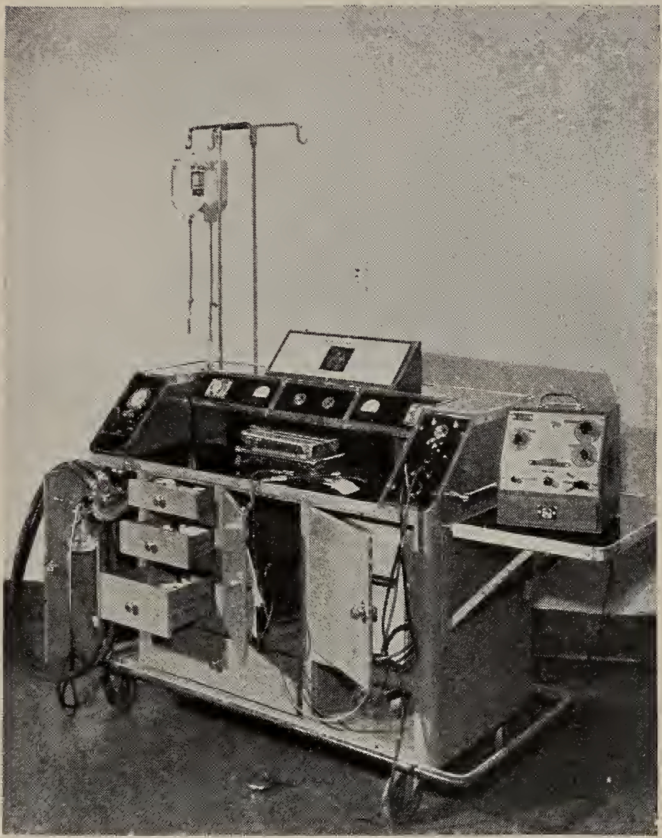

Fig. 4. The Mobile Cardiac Resuscitation Unit, designed in order to have immediately available all necessary equipment for cardio-pulmonary resuscitation. A positive-negative pulmonary resuscitator, direct writer electrocardiogram machine, built-in electric defibrillator, electro-phrenic stimulator, instruments, tracheal aspirator and drugs are part of the unit.

Because of expense, such a complete unit is not always available, but certainly every operating room would be negligent if an electrical defibrillator were not present.

NEUROLOGICAL SEQUELAE FOLLOWING CARDIAC RESUSCITATION

We are now in the process of evaluating our statistics in this regard. The cardiac arrest registry provides, for the first time, an opportunity to study periods of complete anoxia in the human.[7] For many years such conclusions had to be obtained from laboratory data.

It can be said now, however, that one can almost surely predict some degree of nervous system dysfunction if complete circulatory failure is present for more than four minutes. For this reason, it is so vital that the physician be alert to the possibility of cardiac arrest and that he be prepared to act without delay.

Even after delays of fifteen to twenty minutes, the heart's action can be restored. The problem revolves about a prevention of the irreversible brain damage. In spite of what would appear to be severe neurologic vantage as evident by hyperthermia, convulsions and unconsciousness for a period of twenty-four to forty-eight hours, one is frequently surprised to see a return to normal cerebral function, and hope should not be abandoned for such patients during the first several days. I recall one case from New Zealand in which the patient was unconscious for twenty-four hours; repeated convulsions were present; and in the next several days, the patient regained consciousness but remained mentally confused for another four to five days. The patient's recovery, however, was sufficient and within several additional days, he was judged to be in full control of his senses and was able to sign a will.

PROGNOSIS

So encouraging are the results following prompt treatment in cardiac arrest that every effort should be made to establish the resuscitative procedure as a part of every physician's armamentarium. Shortly before his death, Dr. Lahey reported a permanent survival of more than 76 per cent in thirteen recently experienced cases at the Lahey Clinic. In our registry we were able to report such a survival in only 28 per cent of 1,200 patients. An analysis of each case, however, indicated that the future should see a marked improvement since frequent causes of failure were delays in diagnosis, lack of knowledge or failure to apply knowledge of the resuscitative procedure, or inadequate equipment. With a wider understanding of the indications for cardiac resuscitation and the resuscitative procedure, we should look forward to a marked increase in survivals.

Especially is this imperative since, in the majority of cases, these are patients who do not deserve to die on the basis of their pathologic condition. A majority give no history of previous cardiac disease.

Because of the need for a more complete and practical understanding of cardio-pulmonary resuscitation, Dr. L. C. Reid and myself, under the direction of Dr. J. William Hinton, Professor of Surgery at the New York University Post-Graduate Medical School have been conducting regular postgraduate courses in cardiac resuscitation. Besides instruction in all of the related phases, practical training is given in cardiac massage, electrical defibrillation and such.

PREVENTION

Prevention, the most important aspect of all, has been given attention by most authors, and their suggestions have included the necessity of maintaining an adequate airway, preventing undue anxiety of the patient, avoiding excessive accumulation of carbon dioxide, diminishing the number of anesthetic agents administered during one operation and a better maintenance of blood volume.

We would urge a more frequent reliance in preoperative medication on an old, simple and pharmacologically sound drug, atropine sulfate.[8] By interfering with the action of acetylcholine on the patterned cell receptor or that patch of the cell surface where it would ordinarily be absorbed, atropine prevents the rare lethal vagal reflex from taking effect through its release of acetylcholine. Particularly should it be used before procedures likely to elicit a vago-vagal reflex, such as during an angio-cardiogram,[9] during downward traction on the stomach, insertion of an endotracheal tube or before a major positional change, to mention but a few examples. Where vagal tone is increased, as in the obstructive jaundiced patient, larger doses of atropine should be used. Too often atropine is given preoperatively but in insufficient amounts and too long before it is needed.

Reid has stressed the preventive aspect of atropine for many years.[10]

CONCLUSIONS

An attempt has been made to emphasize some of the considerations one should keep in mind during cardiac resuscitation, as elicited from a registry of more than 1,400 actual cases. If the horizon of surgical experience is to expand, it must be able to do so under conditions of added security against sudden aberrations in cardiac conduction. Studies on the resuscitation of the acutely arrested heart have already yielded rich dividends, not only through the resuscitation of many hundreds who otherwise would have died, but through valuable contributions to the understanding of the pharmacology of the heart, its response to reflex inhibition and the action of the cardiac specific tissue, and to knowledge that the heart, the most amazingly resistant organ, may go on beating years after a period of sudden cessation of the ventricular contractions.

Acknowledgement: The author is grateful to Mr. Phil Johnson, Medical Illustrationist, New York University, Post-Graduate Medical School, for the illustrations.

Note: In order for the physician to familiarize himself with various aspects of cardiac massage, fibrillation and such, or to aid his setting up a preparedness program in his own hospital, the author and the University of Missouri School of Medicine offer their facilities and instruction.

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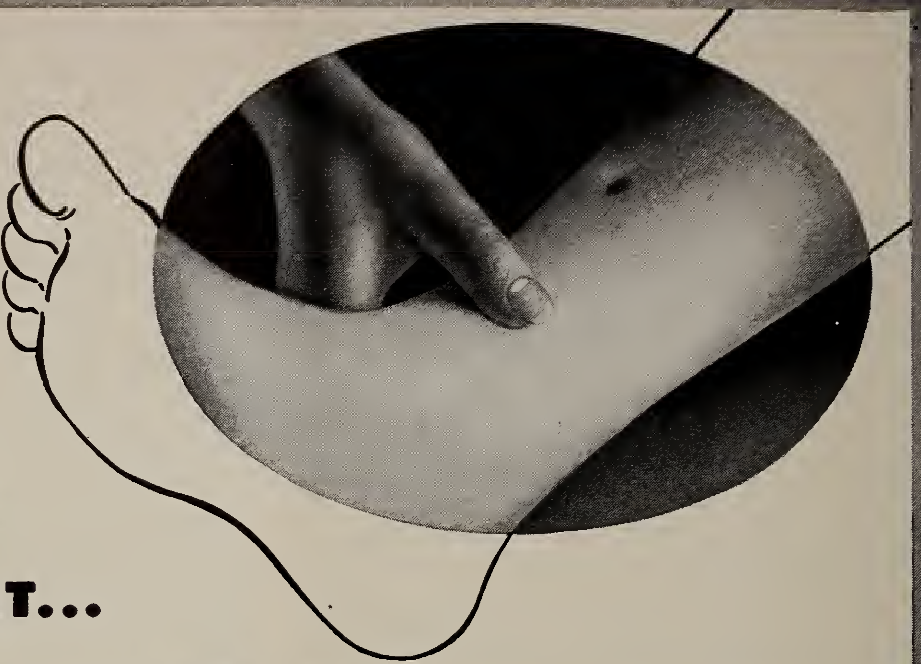

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Refractory Heart Failure

Some of Its Aspects

WILLIAM A. SODEMAN, M.D., *Columbia, Mo.*

THE DEVELOPMENT of congestive heart failure, when recognized by the practitioner, usually leads in its early stages to therapy which satisfactorily controls the state of congestion. Although difficulty in therapeutic control may be present from the beginning, it is usually later in the course of congestive heart failure that there comes a time when the therapeutic program, even when carried out in a seemingly satisfactory fashion, no longer is effective. At this stage the patient is frequently said to have "refractory" heart failure. The development of such a refractory state may stem from a number of causes. An assumption cannot be made that the cardiac reserve has been reduced to such a degree that there is no longer sufficient active heart muscle to carry on the necessary activities of life, even at rest. Surely, when a patient reaches this state, despite the fact that all methods of treatment have been optimally used for control of his congestion, he truly has refractory heart failure. However, it frequently happens that the state of refractoriness is assumed when the conditions stated are not met. It is well, therefore, in all instances of so called refractory heart failure to consider possible factors in the patient's diseased state as well as in the therapeutic program which may be producing a suboptimal handling of the patient.

In all patients with congestive heart failure the "optimal" treatment should be instituted. In most early cases the administration of digitalis, diuretics and rest, in varying degree, may effect a satisfactory result. Under these circumstances frequently all of these procedures are not necessary, and some of them have not been or are not being used to the extent possible. If the patient's disease then advances to a point at which the program is not satisfactory, the physician may feel that the patient has reached an irreversible state. It is then that the review of what is optimal for the patient in the way of treatment is extremely important.

Optimal therapy is difficult to evaluate. What is optimal for one patient is not optimal for another. Optimal use of a drug or procedure in one individual may not be optimal in another. The procedures which benefit one person may harm another. The following discussion concerns a number of important items which must be considered in the evaluation of a program as optimal for a particular patient.

REVIEW OF DIAGNOSIS

One of the most important factors to establish is that the primary diagnosis has been a satisfactory one and that no new factor has been introduced.

Primary Diagnosis.—It is possible that the diagnosis of congestive heart failure may have been in error. Other causes for edema, such as cirrhosis of the liver, nephrosis or nephritis, must be definitely ruled out. In addition there are certain cardiac states which produce a clinical picture of congestion but which are not amenable to the usual treatment for congestive heart failure. They require a form of therapy dictated by their nature or etiology. This is true of myxedema, hyperthyroidism, beri beri and various types of active myocarditis. Similarly, certain types of anatomic or mechanical defects produce symptoms and signs which are not effectively controlled by the usual regimen for congestive heart failure. Constrictive pericarditis and chronic tuberculous pericarditis are examples. The former must be treated by removal of the constricting influence, and the later by removal of similar effects through the use of chemotherapeutic agents if possible before chronic fibrous constriction takes place. Certain other anatomic lesions may produce sufficient cardiac strain to eventuate in cardiac failure which, as time goes on, may not be satisfactorily controlled because of the persistent strain of the primary disease. Here, or preferably before this stage is reached, correction of the defect may be possible by surgical means. Examples are some instances of mitral stenosis, patent ductus arteriosus as well as other types of arteriovenous fistulae. Patients may show remarkable degrees of recovery following procedures to correct such defects when they have responded inadequately to treatment for congestive heart failure previously.

Progress in and New Developments in the Cardiac State.—It is possible that during the course of the treatment new factors have arisen in the patient's cardiac state which interfere with the therapeutic program. For example, myocardial infarction may cause the reappearance of congestive heart failure which previously has been under control. At times in older patients the onset of myocardial infarction may not be manifested by significant pain, and acute heart failure developing from it may mask to some degree minor manifestations of chest pain. It is well, with onset of congestive heart failure, in older individuals particularly if heart failure has been present before and brought under control, to suspect possible myocardial infarction and take means to establish its presence or absence.

The onset of an arrhythmia, especially if it is rapid, may throw a patient into congestive heart

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failure when he has been carrying on adequately previously. The onset of auricular flutter or fibrillation, may, if the loss of cardiac reserve has reached a critical level, make it impossible to control the congestive state unless the arrhythmia is controlled or removed. Such arrhythmias may develop insidiously without the patient's knowledge, particularly in older individuals. Other conditions which throw added strain upon the myocardium, such as hypertensive states or exacerbations of such states, reactivation of rheumatic fever or the effects of developing bacterial endocarditis, may similarly interfere with compensation and throw the patient into heart failure which is difficult to control. Again, therapy must be directed at the newly developed factor.

Progress in and New Developments of Non-Cardiac States.—It is important to establish the presence or absence of additional complicating disease that may interfere with therapy. For example, the development of an anemia may disrupt an effective program. In reduction of hemoglobin levels to 50 per cent or less, oxygen deficiency in the tissues is prevented by adjustments in the cardiovascular system. There is increased cardiac output and an increased load thrown upon the heart. This new additional load may throw enough strain upon the heart to produce decompensation despite the treatment. The correction of the anemia, when possible, may make a program for congestive heart failure effective when the patient has been refractory previously. Transfusions may be necessary to control the anemia if its cause cannot be removed and the anemia corrected otherwise. There must be caution in the use of transfusion in patients having potential congestive heart failure or heart failure itself. Pulmonary infarction, which often occurs in patients with congestive heart failure, is not infrequently a factor which makes the program for congestive heart failure ineffective. Pulmonary infarction is not always easy to recognize. It is frequently misdiagnosed for it may manifest itself only as a low grade febrile state with some tachycardia or, at times, as pulmonary findings which are misinterpreted as pneumonia or as recurrent pneumonia. So called "masked" hyperthyroidism is also an unrecognized factor at times in refractory heart failure. In older patients, particularly those having auricular fibrillation, florid manifestations of hyperthyroidism are not always seen or are not always a dramatic part of the symptomatology and clinical picture.

Because of digitalis effects, low salt diets or other circumstances the patient with congestive heart failure may enter a stage of malnutrition or starvation. Refractoriness to treatment may develop upon this basis, especially if protein malnutrition is extensive. Under these circumstances it may be desirable to stop the diuretics, to administer sodium cautiously if low sodium diet is a factor, even at the expense of inadequate control of congestive heart failure, and at the same time to treat the patient nutritionally until he improves from that standpoint. The previously used aspects of the program may then be reinstituted later.

It is clear that the development of so-called refractory congestive heart failure requires review not only of the patient's primary diagnosis, but also of the present status of the individual to determine whether or not an additional factor, which is important either in reducing cardiac reserve or in increasing strain upon the myocardium, has appeared.

REVIEW OF THERAPY

There may be inadequacies in and complications to therapy which lead to suboptimal handling of the patient. As already stated, early in congestive failure it is possible that suboptimal use of procedures may cause complete disappearance of congestive heart failure because the disease is not far advanced. However, when the disease advances to a point beyond which the program is not satisfactory, the optimal use of each and every procedure may be extremely important in effecting adequate control of the congestion. Suboptimal handling of the patient may result from inadequate use of procedures, omission of procedures or complications to therapy. Some of the most important of these are listed.

Rest.—Little comment will be made upon rest. There has been considerable change in the attitude on bed rest in the cardiac patient in recent years. The sitting position is obviously more comfortable from the standpoint of dyspnea and, in fact, use of the chair rather than the bed for rest is considered satisfactory therapy. Ambulation of the congestive cardiac patient is now standard practice as soon as possible. This tends to prevent the complications of stasis. However it is perfectly clear that excessive physical activity will lead to cardiac decompensation and that the evaluation of rest in therapy is important when the patient is refractory.

Status of Digitalization.—The effectiveness of digitalis in patients with congestive heart failure requires no comment. However, the use of the drug does. The rules of thumb commonly used in digitalization of a patient lead some to believe that specific doses of digitalis may be given to individuals upon the basis of their weight, and the amount of drug then dropped to a so-called maintenance dose. Even with preparations such as digitoxin, in which the absorption factor is least variable, the effect of the drug upon the individual and upon the individual's heart is variable. In all patients the dose of digitalis should be adjusted to the patient's own individual needs. An average amount may be given at the beginning to help saturate the patient only as a guide to further administration of digitalis to the proper level for that particular person. This must be done and the dosage adjusted upon the patient's reactions to the drug and upon the effects on the patient's circulation. Many patients therefore receive suboptimal doses of digitalis, their physicians believing that they are getting optimal dosage. This is a frequent cause of unsuccessful control and may erroneously be interpreted as refractory heart failure, which can be corrected by proper adjustment of the dose.

Patients put to bed with congestive heart failure and given rest, digitalis and diuretics often respond satisfactorily. They may respond due to the rest and diuretics even though the digitalis is not given to the optimal level for that individual. After the time when the individual again is permitted to be up and exercise to some degree, and the effects of rest are no longer totally operating in the maintenance of a normal circulation, the need for digitalis to the greatest point of effectiveness becomes important. This situation should be reviewed by the physician when the patient becomes "refractory."

Failure of slowing of the heart when auricular fibrillation is present, with general failure of response of the congestion, should lead the physician to suspect other factors being present, as already stated. These include chronic infection, hyperthyroidism and active myocarditis.

Digitalis may be utilized suboptimally when it is given in excess as well. Generally the signs of digitalis toxicity are present and, since they are well known, such a state is usually recognized. However there are some instances of advanced congestive heart failure, when toxicity is not clearly in evidence, in which the patient improves when the digitalis is reduced or stopped for a period of time. Toxicity from digitalis, by the production of frequent extrasystoles or tachycardia, may reduce the efficiency of the heart and precipitate the individual into congestive heart failure when he has not been in congestive heart failure. When large doses of digitalis are used and the failure progresses, it is important that these aspects of the use of digitalis be reviewed.

My experiences in a large charity hospital indicate that patients are often sent in from rural areas in varying stages of digitalization when they are in congestive heart failure. Because of the great variability in the type of preparation, the color of tablets and the physical nature of the medication, the patient may not know that he has taken digitalis. The new observer, unaware of the fact that the patient has received some digitalis, may attempt rapid digitalization of the individual, throwing the patient into digitalis intoxication. Under these circumstances rapid regular heart action from digitalis block may be thought to result from the heart disease and more digitalis is given.

Water.—Inadequate supplies of water, because of therapeutic restriction, are not frequent now. There has been, in the last several years, a considerable upswing in the use of large amounts of water and control of salt intake. Water restriction may produce hypertonic dehydration. Urea and salt retention develop and changes in the kidneys may take place, as reflected by the presence of casts and red blood cells. This may lead to a state which, in the past, has been interpreted as refractory heart failure. It is easily corrected by the administration of water, as is usually done at the present time.

Electrolyte Disturbances.—In the past, procedures to influence the electrolyte balance have not been as highly developed as they are at the present time. These measures are often effective in the control of heart failure when those already mentioned are not adequate. Patients considered refractory in the past are now well handled with procedures directed at electrolyte control. Some of these important changes will be discussed.

Sodium Restriction.—The control of the intake of the sodium ion, with amounts of salt reduced to 1 or 2 grams per day in the diet, is important in the management of many patients with heart failure. There are differences of opinion on marked sodium restriction and the use of mercurial diuretics in some patients. Some physicians prefer to use rigid sodium restriction to obviate the use of a diuretic. Others prefer more liberal sodium intake and a greater use of the mercurial diuretics. There are many patients in whom this choice may take place. In others who are more refractory to therapy both procedures are absolutely essential.

Salt restriction may result in three general difficulties. Occasionally in patients having so-called salt-losing nephritis, salt is lost excessively in the urine. If restriction is also carried out in the diet, marked dehydration may take place and the results of sodium lack, as will be described, may occur. Secondly, a patient may take additional sodium despite his dietary instructions. He may unconsciously get salt in his diet. This may happen if his instructions have not been adequate and he takes sodium bicarbonate or some other sodium containing substances which he does not consider in the category of salt. He may also take foods with much salt in them not realizing their content. Due to the unpalatability of the diet when it is low in salt the patient may cheat, by taking salt to make the diet more palatable. Both of these situations can be detected by checking the amount of salt in the twenty-four hour specimen of urine. Thirdly, the poor food intake from unpalatable low sodium diets may produce anorexia and a continuing train of symptoms related to malnutrition resulting in additional refractoriness.

Mercurial Diuretics.—Diuretics effective in sweeping out water and salt have, because of their efficiency, been used extensively in the treatment of refractory heart failure. Their exhibition may make the difference between success and failure in the program if the failure is marked or if the diet is fairly liberal in sodium. Mercurial diuretics are generally markedly effective. There is variability in the response to these drugs due to a number of factors, including diet, age and unrelated pathologic changes elsewhere in the body. This discussion is not concerned with the general reactions to mercurial diuretics, such as sudden death from ventricular fibrillation, activation of epilepsy and local reactions but relates to the stage of refractoriness which may develop during their use.

Without regard to the pros and cons of action of the mercurial drugs, one may assume that the mercurials are effective diuretics through suppression of tubular absorption of electrolytes, sodium, chloride, potassium, and others. The concentration of sodium and chloride in body fluids determines, in part, the effectiveness of this action. Activity of the drug would produce, depending upon its relative effectiveness from person to person, a great or a small loss of chloride. Variation in sodium output would also occur. Depending upon this effectiveness, along with fluctuations in intake of sodium and chloride, a number of individual variations in the electrolyte pattern may appear. Four such variable disturbances of importance are described.

In the first place mercurials may not be effective if the heart failure itself has so reduced glomerular filtration that there is no electrolyte available for mercurial action in the tubules. Under this circumstance there is insufficient glomerular filtrate presented to the tubules for any remarkable action by the mercurials. Here, intravenous aminophyllin given slowly, one hour to one hour and a half after the mercurial diuretic is given, may increase glomerular filtration sufficiently to produce enough filtrate for significant mercurial action in the tubules.

A second way in which the patient may be refractory to mercurials is frequent in the early stages of their exhibition. At this time there may be sufficient sweeping out of chloride in the kidneys, especially if chloride intake is low, so that chloride loss remarkedly exceeds sodium loss. The resultant reduction in blood chloride may be great enough to make the patient refractory to the mercurial. This level is variable. Sometimes the range is in so-called low normal and easily elevated by oral ammonium chloride to make the patient again responsive to the drug. Frequently if the blood level of chloride is below 86 meq. the patient is refractory. He becomes more water logged and, despite the use of the mercurial drug, the severity of the heart failure progresses. This state, termed hypochloremic alkalosis, may sometimes exhibit some of the symptoms of the low salt syndrome described below. Clinical differentiation is often satisfactory but, where there is difficulty, studies of the blood will indicate the presence of alkalosis, low chloride levels and sodium levels which are within normal range. Treatment can be carried out by stopping the mercurial drug, and the use of chloride ions with or without a cation exchange resin. Chloride may be given as dilute hydrochloric acid, 3 to 5 cc. three times a day by mouth, or as large doses of ammonium chloride, 6 to 10 grams in divided dose per day. After the electrolyte disturbances are corrected the patient may then become responsive to the mercurial diuretic again.

A third disturbance which may occur with the use of mercurial diuretics is the low salt syndrome. This usually is due to the efficiency of the drugs in the face of low salt intake or occasionally in patients with salt-losing kidneys. It is important to watch for this circumstance in patients on low salt diets obtaining such diuretics, as well as in those with profuse sweats, blood loss and vomiting and diarrhea. In this condition there is such an outpouring of sodium that hyponatremia develops. Chloride balance, often because of the administration of ammonium chloride, remains satisfactory. Acidosis, with resultant reduction in carbon dioxide combining power, low blood sodium and azotemia, frequently appears. A variable train of symptoms results: anorexia, nausea, vomiting, oliguria, apathy and, at times, mental abberation. Weakness, faintness and tachycardia develop. Mental confusion occurs.

These symptoms, occurring in varying combinations and in varying degree, may lead the physician to believe that certain other states are present. For example, if the patient is one with hypertensive heart disease, the development of oliguria and the presence of red cells and albumin in the urine, may lead the observer to conclude that terminal nephritis has developed. The presence of azotemia may lead him to believe that his impression is confirmed. He may then decide that the patient has reached a terminal state and that no therapy would be effective. In many patients it also happens that the edema becomes markedly worse and it is often thought that the congestive heart failure can no longer be controlled even with increasing doses of drugs. Since more vigorous therapy tends to make the patient worse, the observer may also believe that the patient is terminal and not apply indicated treatment. At times the clinical picture is that of peripheral collapse and the situation may be mistaken for myocardial infarction. If fever, dyspnea and cyanosis appear, as they often do, the combination of findings may be mistaken for pneumonia and, again, the wrong treatment applied.

Under any of these circumstances, the mercurial drug should be stopped, for hypotonic dehydration has occurred. The patient needs hypertonic sodium chloride. If the patient does not receive sodium chloride in adequate amounts the condition may result fatally and be ascribed to heart failure rather than to inadequate therapy. This is a serious complication and mortality rates are high even with vigorous and well controlled measures. Isotonic salt solution is not satisfactory. It must be hypertonic, usually 250 cubic centimeters of 3 to 5 per cent solution given slowly intravenously and repeated as necessary. Hospitalization is essential. During such treatment the congestion may seem to get worse temporarily and the edema will not be controlled but, after the disturbance in electrolyte balance is corrected, the patient may then again become reactive to the previous type of therapy.

Most important is the differential diagnosis of this electrolyte disturbance from some others, particularly that described previously and the one described later, for the procedures applied may be deleterious if the wrong state is assumed. Therefore it is well, if the circumstances are not clear cut, to confirm the clinical diagnosis by laboratory means.

Still of more importance is the careful watching of the patient before any of these circumstances develop to prevent their occurrence. Preventive therapy will often eliminate these complications which at best have a high mortality.

A fourth disturbance, occurring in the absence of mercurial therapy, is chloride acidosis. It is sometimes seen, however, during mercurial therapy. The picture is more common when large doses of ammonium chloride are given and especially in the presence of renal insufficiency. Here an acidosis develops, associated with elevation in blood chloride and normal blood sodium levels. The clinical picture is insidious in onset and is characterized by many of the symptoms seen in low salt syndrome, such as anorexia, nausea, vomiting, mental apathy and, at times, even mental confusion. It is important that chloride administration be stopped and the acidosis treated. This can be done with intravenous lactate or bicarbonate solution.

SUMMARY

It is obvious that every patient with so-called "refractory" heart failure should be looked upon as a patient who has not been handled optimally. Every such instance should be studied for the possible development of new problems, either in the vascular system or outside the vascular system, which, at the same time, would have a bearing upon the heart failure. The entire program should be reviewed to be sure that all aspects of therapy have been evaluated satisfactorily and established optimally. If diuretics, especially mercurial diuretics, have been given, the possible complications of such therapy in terms of electrolyte imbalance should be considered. It is only through a general survey of the patient for an evaluation of these factors that they may be found and therapy instituted to minimize or eliminate them.

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Cancer

Early Recognition Through a Follow-Up System

RICHARD E. JOHNSON, M.D., *Columbia, Mo.*

It is an accepted principle that periodic follow-up examinations are of considerable value in the clinical management of patients who have had a cancer. The value stems primarily from detection of local recurrence of the primary tumor and metastases to the regional lymph nodes. The possibility exists that these same periodic examinations will yield early recognition of new cancers at any site. This is the point that will be examined in this article. I will deal with the appearance, at any time subsequent to the initial admission, of a cancer of the breast or of a cancer of the lip. Before discussing these subsequent cancers, a method for identifying early recognition must be agreed upon.

EARLY RECOGNITION

Early recognition of cancer will have two measurable effects:

1. The clinical extent (i.e., stage) of the disease will be more limited.
2. The length of survival will be increased.

Both of these effects will occur even in the absence of treatment. They differ in that the first effect is independent of the treatment, while the second may be modified thereby. Consequently the first effect is to be preferred in an attempt to identify early recognition. The standard for comparison will be the patients who had cancer of the breast or cancer of the lip at the time of initial admission and in which no previous treatment had been received.

FOLLOW-UP PROCEDURE

All patients with cancer are followed through periodic clinical examinations until the time of death or for a maximum period of five years. One major exception to this five year rule is the case of breast cancer in which annual examinations are continued through the tenth year. The frequency of these examinations is varied to fit both the type of cancer and the individual patient. The maximum interval between examinations is one year. There is no fixed minimum but usually it is two or three months. The extent of the examination also is adapted to the type of cancer and to the individual patient. In general, it may be said to be directed primarily toward the site of the initial cancer and the regional lymph node groups.

The follow-up of patients with benign lesions is much more variable and depends on the interest of the current clinic examiners, principally the resident staff. The fact that a number of subsequent cancers are observed in this group of patients is related not so much to the periodic examinations which seldom extend beyond two years but that once a patient is declared eligible for treatment at the State Cancer Hospital, he remains so indefinitely. Hence, the appearance of symptoms suggesting cancer usually results in immediate referral once again to this hospital.

CANCER OF THE BREAST

During the years 1941 through 1947 there were seen at the Ellis Fischel State Cancer Hospital a total of 4,303 female patients. Among these there were 468 patients with unilateral cancer of the breast who had had no previous treatment. There were also 259 patients with a recorded diagnosis referrable to the breast and in whom no cancer was demonstrated at the time of initial examination. Among the 468 cases of primary unilateral cancer, there have been seven in whom an independent primary cancer has appeared in the opposite breast. Among the 259 instances of benign lesions, two have subsequently developed breast cancer. Among all the remaining patients, three cases have been recorded. This includes two among 498 cases of initial skin cancer.

TABLE 1.

DISTRIBUTION BY CLINICAL STAGE OF ALL CASES OF UNILATERAL BREAST CANCER PRESENT AT INITIAL EXAMINATION, AND OF ALL SUBSEQUENT CANCERS OF BREAST.

Stage	*Cancer Initially*	*Subsequent Cancer*	*Initial Lesion*
I	92	4	3—Breast cancer 1—Papilloma of breast
II	184	5	3—Breast cancer 1—Chronic cystic mastitis 1—Skin cancer
Operable	29	2	1—Breast cancer 1—Skin cancer
Inoperable	163	1	1—Cervix cancer
	468	12	

In table 1 is shown a comparison of the stage of the disease in these twelve cases with that in the 468 cases of primary unilateral breast cancer. The meanings of the stages are as follows:

Operable—Clinically operable by Haagensen-Stout criteria, but not subjected to radical mastectomy.

Stage I—Clinically operable without positive nodes in radical mastectomy specimen.

Stage II—Clinically operable with positive nodes in radical mastectomy specimen.

The principal point to note is that in only one instance was the case in an inoperable stage. This was an inflammatory form of breast cancer in a young woman who had been previously treated for epidermoid carcinoma of the uterine cervix.

Surgical Pathologist, Ellis Fischel State Cancer Hospital.

This suggests that with the exception of a small proportion of highly malignant tumors, the diagnosis of breast cancer can be established in the operable stage of the disease. The proportion of cases with proven positive nodes among those treated by radical mastectomy shows a similar but less striking improvement. In order to evaluate these points, one needs to consider in greater detail the circumstances under which these new cancers were recognized.

In judging the effectiveness of the follow-up system, several facts must be noted. Ten of the twelve cases had already had a malignant tumor within the preceding five years and were being examined periodically. In seven of these the previous cancer was in the opposite breast so that the site of the subsequent cancer was included in the examination. Despite this, in nine of the twelve cases the discovery was made by the patient and, in five of these, axillary metastases are known to have been present. In all three cases discovered by the examiner, the axillary nodes were proven negative. Before concluding that more frequent examination would have achieved the same result in the nine cases, the possibility should be considered that the difference is a property of the tumors. In one of the three cases, the patient delayed treatment for a period of seven months after its recognition because the tumor did not bother her in any way. It is possible that the rapidly evolving cancers produce early symptoms due to active growth and infiltration and are discovered by the patient, whereas the tumors of low malignancy are so slow in their evolution that the examiner finds them before they produce symptoms.

Since the overall effectiveness is so unsatisfactory, it is desirable to review the cases in detail to note any common factors that would have been detectable in advance. The data for the seven cases in which cancer of the opposite breast appeared later are shown in table 2. Three prominent features are readily seen. In all six cases in which the status of the axillary nodes is known, there were metastases from the initial cancer. The remaining case was a lesion of the inner hemisphere and a poor operative risk. The second feature is that all seven new cancers appeared within five years. A third feature is that in the three patients under 60 years of age the second cancer had produced axillary metastases, while in the four over 60, there were three with known negative nodes. We might then select a group for concentrated follow-up by the following criteria:

TABLE 2.

SECOND PRIMARY CANCER OF THE BREAST IN 468 PATIENTS.

	Initial Cancer				*Second Cancer*		*Discovery*
Year	*R*	*S*	*A*	*Stage*	*Interval*	*Stage*	*By*
1942	W	F	40	II	4/1*	II	Patient
1942	W	F	39	II	2/2	II	Patient
1943	W	F	51	II	0/7	II	Patient
1944	W	F	66	II	1/7	I	Examiner
1944	W	F	76	II	1/1	I	Examiner
1945	W	F	79	Oper.	3/10	Oper.	Patient
1947	W	F	74	II	4/4	I	Examiner

* 4/1 = 4 years, 1 month.
The interval is that between operations.

1. The initial cancer produced axillary metastases.
2. The initial cancer was treated less than five years ago.
3. The patient is under 60 years of age.

A fourth feature which is not detectable in advance is that all of the second cancers were in a clinically operable stage. This may be the result of a reluctance to make a diagnosis of a new but inoperable cancer in a patient who has already had cancer of the opposite breast. There is no way that one can overcome this possible bias in retrospect. The point to be noted is that it does cast doubt on the meaning of the low frequency of inoperable cases among the subsequent cancers.

TABLE 3.

BENIGN LESIONS OF THE BREAST.

		Subsequent Cancer	
Initial Lesion	*No.*	*Interval*	*Stage*
Adeno-fibroma	41		
Complaint	59		
Chronic cystic mastitis (clinical)	66		
Chronic cystic mastitis (excision)	76	5/5*	II
Papilloma	17	4/7	I

* 5/5 = 5 years, 5 months.

In table 3 is shown a classification of the benign lesions. The term "complaint" is used to designate those cases in which there are symptoms such as pain referrable to the breast, but no objective evidence of disease. The principal feature of note is that in both cases with subsequent cancer, the patient was over 60 years of age at the time of initial examination. In the case with a preceding papilloma, the latter diagnosis is based only on the presence of a clear yellow discharge from the nipple. The patient was a frail old lady of 70 years. If the cancer was already present, it was of low malignancy, for four and one-half years later there still were no axillary metastases. Nevertheless, a local excision initially might have had some advantage.

In the case with chronic cystic mastitis treated by local excision, prophylactic simple mastectomy would have had to be a bilateral procedure for the cancer appeared in the opposite breast. There were eleven cases in this group of seventy-six who were over 60 years of age, in all of whom it would have been necessary to do bilateral simple mastectomy in order to prevent the one cancer that has so far appeared. I doubt that this would be justified.

In the three cases that appeared in women other than the two groups already tabulated, the discovery was made in every instance by the patient (table 4). Two of them were under observation for skin cancer. The first named had an operable breast cancer but was 79 years of age. A simple mastectomy was done. The second was 56 years of age. The radical mastectomy specimen showed several positive nodes. The third case was mentioned previously, an instance of inflammatory carcinoma in a 47 year old woman who had been treated four years before for an epidermoid carcinoma of the uterine cervix. As noted, routine examination of the breasts is not done in such cases in the follow-up clinic.

TABLE 4.

SUBSEQUENT BREAST CANCER IN PATIENTS TREATED INITIALLY FOR ANOTHER MALIGNANT TUMOR.

Initial Lesion	*Age*	*Interval*	*Stage*
Epidermoid carcinoma of skin of scalp ..	79	2/0	Oper.
Epidermoid carcinoma of skin of forearm	56	0/7	II
Epidermoid carcinoma of the cervix ...	47	4/1	Inoper.

The standard procedure of the follow-up clinic cannot be said to be satisfactory for the early recognition of breast cancer. That nine of the twelve cases of a new cancer were discovered by the patient, not the examiner, is mute testimony to this criticism. On the other hand, I doubt the practicality of increasing the frequency or extent of follow-up examination even for selected groups. Far more feasible would be an educational program for the patient directed toward the practice of self-examination.

LIP CANCER

During the period 1941 through 1947 there were admitted 3,762 white male patients. Of these, there were 252 with a cancer of the lip that had received no previous treatment. In another 246 cases there was a benign lesion of the lip that was classified either as leukoplakia or chronic inflammation. In 1,167 cases there was a malignant lesion of the skin, excluding melanomas and sarcomas.

TABLE 5.

NUMBER OF LIP CANCERS APPEARING IN EACH YEAR OF FOLLOW-UP SUBSEQUENT TO BENIGN LESIONS OF THE LIP AND CANCERS OF THE SKIN.

Year of	*Initial Lesion*		
Follow-Up	*Lip—Benign*	*Skin—Malignant*	*Total*
1	2	3	5
2	4	1	5
3	1	4	5
4	2	2	4
5	3	3	6
Over 5	4	6	10

In the 246 cases with a benign lesion of the lip, a subsequent lip cancer has appeared in sixteen instances. From the 1,167 cases of skin cancer, there have been produced nineteen cases of subsequent lip cancer. One additional case has been seen in a patient treated four and one-half years previously for cancer of the rectum. The time of recognition of the lip cancer relative to the initial admission is shown in table 5. In contrast to breast cancer, there is no suggestion of a point of time beyond which follow-up might be discontinued.

In table 6 is shown the distribution by clinical stage for the initial cancer cases and the subsequent ones. The meanings of the stage designations are as follows:

Stage Ia—Treatable primary tumor without metastases at any time.

Stage Ib—Treatable primary without metastases on admission, but appearing later.

Stage II—Treatable primary with metastases on admission, or untreatable.

The retrospective subdivision of stage I is possible because prophylactic neck dissection was done only in rare instances.

The principal points to note are the absence of stage II cases among the subsequent cancer group and the decrease of the frequency of late metastases among all stage I cases from 12 per cent (29 in 239) to 8 per cent (3 in 36). The latter change is so slight that no meaning other than chance variation can be assigned to it.

TABLE 6.

DISTRIBUTION BY CLINICAL STAGE OF 252 LIP CANCERS PRESENT AT INITIAL EXAMINATON AND OF ALL SUBSEQUENT LIP CANCERS.

Stage	*Lip Cancer Initially*	*Subsequent Lip Cancer*
Ia	210	33
Ib	29	3
II	13	—
Total	252	36

The first point does merit additional study. It should be noted that one would expect only one or two stage II cases in the subsequent group, using 5 per cent (13 in 252) as the rate of expectation. An examination of the case histories of these thirteen stage II cases reveals that one had severe senile dementia, two were mentally deficient, three refused treatment and one was blind. In contrast, of the remaining six, two are living and well more than five years. Certainly one-half of the advanced cases must be excluded as containing special circumstances to explain delay in recognition. This reduces the expected number to not more than one case.

The weight of the evidence would support the contention that the slight improvement in stage of the subsequent over the initial cancer group can be credited to alert patients who have already shown a willingness to come to the hospital for a treatable skin cancer or a benign lesion of the lip.

SUMMARY

An examination of the clinical stage of subsequent cancer of the breast and cancer of the lip appearing in patients referred to the State Cancer Hospital reveals no conclusive evidence that the follow-up system has resulted in earlier recognition. The small changes observed in that direction can be accounted for by an alert patient group rather than a direct result of periodic examinations.

Ellis Fischel State Cancer Hospital.

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Special Articles

Training for General Practice

ROSCOE L. PULLEN, M.D., *Columbia*

The University of Missouri School of Medicine has as its mission the production of general practitioners for the State of Missouri. Accordingly, it is fitting that one examine briefly the problems concerned with training for general practice, both at the undergraduate and postgraduate level.

The immediate problems that confront medical educators concerned with preparation for general practice are these unanswered questions: What is the nature of general practice? What can a general practitioner do and what should he not do? It is assumed commonly that general practitioners are capable of performing general medicine, general pediatrics and general obstetrics but that major surgery should be relegated to the specialist in that field. From an educational standpoint, such assumptions are difficult to defend or to apply in the curriculum leading to general practice. The scope and limitations of any field of medical practice, whether general practice or specialism, are ever changing, influenced by sociologic trends, scientific and technologic progress and other factors too numerous to mention. There is a growing awareness among medical school faculties that, as fields of study, general medicine and general surgery are similar in the manifestations of disease, diagnosis and management, differing only in the operative approach. Differences between general medicine and general pediatrics are based primarily on chronologic ages of patients. Obstetrics, while more amenable to definition, calls for increasing knowledge of physiologic adjustments of the pregnant woman as well as search for systemic disease; and, certainly, the obstetrician is concerned with two organisms (mother and child) throughout pregnancy as well as the separation effected at delivery. Similar comparisons may be made with other forms of medical practice. Such observations reemphasize that most diseases are protean in their manifestations, that no field of medical practice may be demarcated sharply, and that management of the patient demands not only attention to the specific disease entity but consideration of the adaptive responses of the patient as a whole to illness.

Other pedagogic difficulties in training for general practice come to mind. It is conceded generally that 70 per cent or more of illness in man has a psychosomatic or psychiatric background. That general practitioners have need for greater psychiatric training is admitted, but agreement has not been reached among psychiatric educators as to what kind of psychiatric training nor where it can be obtained. Many recent writers have emphasized the need for more training in preventive medicine for general practitioners. Again, one encounters involved problems which need clarification: What is the difference, if any, between preventive medicine and public health? Does preventive medicine have a discipline and body of knowledge which can be taught to the medical student? Is not preventive medicine a "philosophy" of medical practice that should be practiced by all physicians at all times? What is known, scientifically speaking, about the predisposing factors of disease?

Recently, rehabilitation has been presented as a growing area worthy of the attention of general practitioners. As a field of study, rehabilitation transcends the concepts of physical medicine to encompass all fields of medical practice. But here a distinct challenge confronts the physician interested in rehabilitation, namely, that of deriving comparative data in rehabilitation and physical medicine from the influences manifested by religion, environment, occupation, sex, race, economic and social factors, law and other factors in daily life. When such data have been assembled, it is entirely possible that greater knowledge of the predisposing factors of disease may result, thus drawing together both the preventive and rehabilitative phases of illness.

Inasmuch as the general practitioner fulfills the role of personal physician to the family, much is made in some quarters of the social conscience of the general practitioner. All will agree that a strong social conscience is mandatory to the individual physician and that these qualities are essentially the attributes of a gentleman. Furthermore, the qualities should be displayed by all members of the health team, i.e., the paramedical or ancillary personnel as well as the physician. And it is to be hoped that these same qualities extend into all walks of life—the teacher, the businessman, the politician, the banker, the laborer, as well as the patient himself. The development of these qualities in the medical student is best attained by the precept and example of physicians engaged actively in the care of the sick, whether on the medical school faculty or in private practice.

Finally, it would appear that preparation for

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general practice demands comprehension of how the individual practitioner applies his art and his science. As in all educational processes, the student training for general practice must develop the ability to recognize and adjust to changing times. In school, the student is inculcated with the principles of medical science but the successful application of these principles to the practice of medicine requires continuous development which the physician must pursue as long as he practices. In no field of medical practice is this statement more true than in the broad segment known as general practice.

Roscoe L. Pullen, M.D.

Rehabilitation—Reconstruction

HOWARD RUSK, M.D., *New York*

YOU CAN TRAVEL to Korea if you get permission from the Far East Command and a visa, and once you do, you can never get away. You leave a part of yourself in this battered but brave little nation, and you keep remembering things.

You remember the bitter cold in the makeshift bombed-out hospitals. You remember the children who have been blinded by land mines and grenades, the veterans who have lost arms and legs in combat and the old people whose suffering has given them age beyond their years. You remember the long lines which form each evening at dusk in the dusty, crowded city of Pusan before the gates of the Swedish Red Cross Hospital, Maryknoll Clinic and other dispensaries hoping that the next day they will receive medical aid.

But you also remember that in the scores of hospitals, clinics, orphanages and schools you visited that you never heard a child cry, a man groan in pain, or a Korean ask for anything but a chance to get off his knees and continue to fight against Communism. You remember the Children's Charity Hospital in Pusan which is financed by the American miliary members of the Masonic Lodge and their fellow members at home. You remember the countless hours of volunteer time that American and U. N. military physicians and nurses have put in voluntarily working in Korean hospitals and teaching in Korean medical and nursing schools. You remember seeing the over 20,000 medical textbooks which have been donated to Korean medical schools by American doctors. You remember the $1,000,000 in drugs donated by the American drug industry through the American-Korean Foundation. You remember the millions of dollars our American G.I.'s have given from their own small pay to aid the Koreans and you are proud to be an American and an American doctor.

Korea's current health problems started in 1945 when the nation was liberated from Japanese rule. With the departure of the Japanese professional and technical health personnel who had occupied the nation's posts of responsibility for thirty-five years, the primary need was for competent, trained personnel. Through Korea's own resources and outside aid from such groups as the Rockefeller Foundation, some heartening advances were made in training of personnel both in Korea and abroad.

But then came the 25th of June, 1950, when North Korea made an unprovoked attack on South Korea. In the fighting that followed in which the tide of war passed over most of the country twice and some parts four times, 70 per cent of the medical facilities were destroyed. Medical personnel were scattered, many killed and large numbers captured by the Communists. Nearly 3,000,000 or 13 per cent of the population became refugees or displaced persons. Civilian casualties totalled nearly one million with over 350,000 dead. Water supplies, purification plants and environmental health services were destroyed or irreparably damaged. Inflation of currency wrecked the financial structure of the medical and health services. Following in the wake of destruction came the inevitable epidemics of typhoid, dysentery, typhus, smallpox and encephalitis.

Through emergency measures, the officials of the United Nations Civil Assistance Command, working with their Korean counterparts in national and provincial health departments, have achieved one of the world's truly remarkable results in the control of epidemic diseases. At the end of December, 1953, 92,000,000 immunizations had been given for smallpox, typhus and typhoid, and the number of cases of these diseases had dropped from 150,000 in 1951 to 5,600 in 1953 and the death rate from 16,436 to 682.

The situation in Korea can be better understood if its problems are projected onto any Missouri city of 25,000 such as Jefferson City, Webster Groves or Cape Girardeau.

Demolish one fourth of the houses and unroof and damage another fourth. Destroy the sewerage and water systems beyond repair. In this city there are 1,250 people with tuberculosis, of whom 300 are acutely ill. Ninety per cent of the population is infected with intestinal parasites. Several scores of persons have leprosy or are blind. Everyone is hungry on an 1,800 calorie diet and cold in the winter when there is fuel enough only for essential cooking. To meet all the medical needs of these poor unfortunates, there is only one poorly trained medical practitioner. Add to these conditions fear, anxiety and despair, and you have the health picture of Korea today.

Today through governmental programs such as the United Nations Korean Reconstruction Agencies, the Foreign Operations Administration, the Korean Civil Assistance Command, and the Armed Forces Assistance to Korea Program, the long range plans for Korea's reconstruction are underway. Over and above this "official" assistance, however, the people of Korea need assistance on the warm friendly voluntary "people to people" basis that befits comrades in arms against Communism. It is to help provide that aid that the American-Korean Foundation was formed by a group of our leading business, health, welfare and civic leaders who feel that we in the United States owe a tremendous debt to the Korean people for their gallant and costly stand against Communism, a stand that cost them more casualties than our own losses in World War I, World War II and the Korean conflict combined.

Since its inception, the people of America through the American-Korean Foundation have shipped drugs and other relief items valued at $2,500,000 to Korea and have made cash allocations of $1,500,000 to support health, child welfare and educational projects in Korea.

Here are some of the projects which the AKF is sponsoring in health:

Health.—A rehabilitation team consisting of a physical therapist, occupational therapist and nurse has been provided to work in and train Korean personnel in hospitals and clinics in the Pusan area and eventually to work in the National Rehabilitation Centre at Tongnae.

General support grants totaling $40,000 have been given to Korean medical schools.

Over 20,000 medical textbooks and reference books contributed by American physicians have been sent to Korean medical schools.

Scholarship funds have been granted which will permit full maintenance for 100 medical students in Korean medical schools.

A Tuberculosis Control Team headed by a Korean physician trained in the United States and consisting of Korean physicians and nurses has been established in the Ministry of Health.

A Leprosy Control Team headed by a Korean physician who is receiving training in Hawaii under an AKF grant has been established in the Ministry of Health.

A School of Public Health at Seoul National University has been established under AKF auspices with funds contributed by Mr. Edgar M. Queeny of St. Louis who is Chairman of the Board, Monsanto Chemical Company.

Funds have been supplied to send two Korean nurses to New Zealand and two to Hawaii for advanced training.

Funds have been supplied to provide nursing education consultant services to Korean schools of nursing.

Funds were provided for a one month's course for hospital head nurses and a postgraduate course in nursing administration and education and public health nursing.

Grants for general program support have been given to eight Korean Schools of Nursing.

Funds have been granted to meet the operational costs for one year of a Korean National Tuberculosis Association.

Jeep station wagons have been provided for the Nursing, Tuberculosis Control and Leprosy Control Teams.

Paper was provided for the printing of 5,000,000 personal inoculation records.

Two full maintenance scholarships were established in Korean schools of nursing.

Nursing uniforms, books and general clothing have been provided for the Korean schools of nursing.

A twenty-bed ward has been established in Severance Hospital.

Emergency grants totaling $25,000 were given to three clinics in Pusan to meet the added load caused by the Pusan fire.

Eight Korean physicians are receiving graduate training in the United States.

In addition to these projects, the AKF Board of Directors has recently authorized the expenditure of an additional $235,000 in support of health activities. These funds will be spent to support medical, nursing and public health education and to support Korean hospitals and other health institutions.

One of the most inspiring of the AKF's projects is a recent letter appeal made to the physicians of the United States for contributions of $20.00 each to provide Korean physicians with individual packages containing six yards (enough for two suits) of new virgin wool cloth, the necessary findings and a plastic rain coat. Korean physicians are greatly in need of clothing. They prefer Western style suits, but the average height, weight and build of a Korean doctor is quite different from that of his American counterpart. Korean physicians are now primarily wearing used clothing contributed by American relief agencies. These clothes do not fit well as they cannot be successfully altered.

Korean physicians are justifiably proud of their profession and their respected place and the provision of materials for new suits will be of great psychologic and morale value to them. To know that they have been given in friendship by fellow physicians in the United States means new courage and dignity. With the materials each Korean physician receives a letter in Hangul (the Korean language) explaining that the package is a gift from an American physician and a copy in Hangul of the following:

"Resolution or Expression of Appreciation
to the Physicians of Korea

"Whereas, Our valiant allies, the people of Korea, have suffered incalculably since the invasion of the Republic of Korea by the Communist North Korean People's Republic; and

"Whereas, The individual physicians of the Korean Medical Association, a member of the World Medical Association, have shown great courage and personal sacrifice against almost insurmountable odds in meeting the medical needs of their people, therefore be it

"Resolved, That the House of Delegates of the American Medical Association, in session in New York on June 3, 1953, express to the physicians of Korea and the Korean Medical Association our deep and sincere appreciation and admiration for their personal courage and devotion to the nation and their fulfillment of the highest traditions of the medical profession and our firm intention to aid our colleagues, the physicians of Korea both in substance and in spirit."

Hundreds of American physicians have already responded to this appeal by sending their checks for $20.00 to the American-Korean Foundation, 345 East 46th Street, New York 17, New York.

Korea's health needs continue to be urgent and the job ahead is tremendous. Through military measures, Communist aggression has been halted, but the same vigor and determination that marked our military efforts must now be devoted to the economic and social reconstruction of this war devastated nation. Otherwise, we may lose through the "back-door" what we have gained at a tremendous expenditure of lives and money. As Communism thrives on poverty, disease and ignorance, adequate health services are fundamental if Korea is to become militarily, economically and politically secure.

About the author: Dr. Howard A. Rusk, a native of Brookfield and a graduate of the University of Missouri, was in practice in St. Louis until 1942 when he entered the Army Air Forces. During the war, he originated and directed the AKF Convalescent-Rehabilitation Program for which he received the Distinguished Service Medal. Since the end of the war he has been Professor and Chairman, Department of Physical Medicine and Rehabilitation, New York University College of Medicine, and an Associate Editor of *The New York Times*. Since the outbreak in Korea in 1950, he has also served as Chairman, Health Resources Advisory Committee, Office of Defense Mobilization, and Chairman, National Advisory Committee to the Selective Service System.

Last year, Dr. Rusk made two visits to Korea in March and August for the American-Korean Foundation, a nonprofit, nonpolitical, nonsectarian organization concerned with the reconstruction of Korea, of which General James A. Van Fleet is the Chairman and Dr. Milton S. Eisenhower the Honorary Chairman. Recently, Dr. Rusk was elected President of the Foundation, located at 345 East 46th Street, New York 22, New York.

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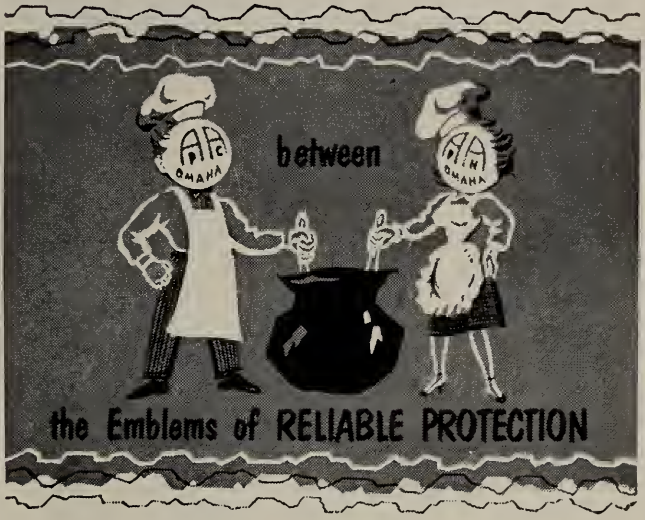
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Among Ourselves

(Editorially Speaking)

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Columbia Missouri Writers Featured

The scientific articles in this issue of MISSOURI MEDICINE were planned in recognition of the new four-year medical school at the University of Missouri. We think the idea of selecting one community in our state and soliciting contributions therefrom, as an occasional feature copy, should be repeated.

But, this takes a lot of work! The credit, in the present case, goes to M. D. Overholser, a member of our Publications Committee, and Professor of Anatomy at the University. He can tell you how many man-hours it required to assemble the scientific contributions printed herein. Moreover, he can testify that any similar project will require months of planning, pleading, cajoling, and arguing in order to assemble this many medical articles, on time, from any medical center.

Anyone who has followed the news items from our various medical schools realizes that a competent staff of teachers is being developed at our State University. Men with outstanding names of national repute have joined the faculty. Perhaps this initial copy, devoted to Columbia contributors, will stimulate further writing from this, our third, four-year medical school in the State of Missouri; we hope so.

There must be other areas in our state which have medical writing talent of sufficient quantity and ability to do the same. Offhand, we think of Springfield, and St. Joseph as likely spots. Cape Girardeau, Hannibal, and others could do the same.

Remember, our avowed purpose in MISSOURI MEDICINE is to make it the best state journal we know how, for all the state, and not just for St. Louis and Kansas City. With the help and cooperation of more members, this can be accomplished, thus bringing to light the latent medical writing potentials throughout the state.

MISSOURI MEDICINE is proud to salute our new four-year medical school at Missouri University, and the medical men of Columbia who have contributed to this issue.

VINCENT T. WILLIAMS, M.D.

En Route

In a drive just completed to the West Coast, we were interested in conversations which we overheard.

At a restaurant in Arizona we were intrigued by two men whom we would judge to be in their forties—rather small of stature, quick, alert—of the terrier type. They attacked medicine and each incited and excited the other. They finally came to the conclusion that a doctor of medicine had to, at all times, respond at once to calls and that he should not be allowed to exercise his judgment as to the urgency of the calls or to take into account his own commitments or his own physical state. They left the restaurant in self-worked-up high dudgeon, bristling with indignation and ready to set upon and tree any hapless doctor who might come by.

We were interested in signs or homes advertising osteopath, chiropractor, and Swedish massage (apparently they do not dare use the word masseur), and at one home we saw the sign, "Herbalist." We inferred that someone was advertising himself as proficient in the medical use of herbs. We have never seen the word before. Maybe this marks the birth of a new cult—something to revivify and formalize what the old styled Indian doctors did.

But, never did we hear the cults berated as to responding to calls. Maybe they always respond because they are not overworked. It is our contention that the public has not been trained to a hostile attitude toward the cults—whereas they have for twenty years been bitterly conditioned against us—government press, franking privileges and injunctions against our own efforts to fight for our own rights. Why? Not because we are or have been bad—but because state medicine would be the keystone of the arch of a socialized state.

Numerous conversations overheard along the way brought us startlingly face to face with the fact that this hostile attitude is not limited to one section of the country but is wide-spread over the nation. It is here—whether it is our fault or not. We should do something about it. At the risk of being repetitious we would say that all doctors should begin enlightening their patients and other friends before an irreparable cleavage takes place.

F. T. H'DOUBLER, M.D.

Et Tu, Benson Ford?

Everybody's kicking our dog around. Medicine is being lambasted from within by the advocates of corporate medicine and a few egomaniacs who claim to know all the answers; socialistic politicians promise "free" medical care for votes; labor leaders promise it for influence. And now a great industrialist comes to the fore and lends his helping hand. *Et tu,* Benson Ford? Your untimely inference that medical men are square wheels on the car of health progress is as unkind as it is untrue. Perhaps from your plentiful supply you may wish to furnish us the round wheels so that medicine might "evolute visibly—at something more than a snail's pace."* Then again, you may wish to balance and align the following defective wheels which stem directly from your industry:

Right Front—Concentrate on safety features in automotive construction instead of on beauty and horsepower. This would certainly reduce the weekend toll of crash victims who constitute too large a percentage of the so-called catastrophic medical cases. In 1952, 38,000 Americans perished as a result of traffic accidents; 1,350,000 additional were injured; a horrible sight for the victim's families, doctors and hospital personnel to witness.

Left Front—Contribute and help in the planning of our future roads and highways regarding safety measures to a greater degree than did your predecessors. After all, the products of your industry created this hazard at a terrific expense to the taxpayer. The horse and buggy highways of today are a menace.

Right Rear—Reduce the expensive gadgets and living room luxuries which come factory-equipped on today's cars, and thereby reduce the initial cost. Reduce also the advertising costs which contribute greatly to the price of a new car.

Left Rear—Release the economic stranglehold the automotive industry has on medical care. The yearly depreciation alone on the family car is far greater than the average family health bill. The interest alone on car payments would contribute a great deal to family health insurance. I wonder how many relief checks each month are used to support your industry. Which is paramount—family health or family car?

And for a *Spare,* Mr. Ford, you might investigate the possible relationship between automotive exhaust and lung cancer. Is it not about thirty years now that the "gas buggy" has been polluting our atmosphere?

MARTYN SCHATTYN, M.D.

"Sluggish Liver"

Many ill-defined human complaints (nausea, dizziness, anorexia and constipation) have been ascribed in the past to a "sluggish liver." Today, the pendulum has swung too far and we deny the role of the liver in illness unless jaundice, ascites or disturbances in clotting time, unmistakeably point to the liver—this is too narrow a view.

This massive organ has circulatory, excretory, metabolic, protective and hematopoetic functions, often primarily involved in pathologic processes and as often secondary to some other disease. The highly specialized hepatic cells are extremely susceptible to damage from toxins or circulatory interference. Because of such enormous physiologic reserve, even major disturbances may fail to produce gross signs or symptoms.

This is not to suggest that we revive a tendency to make unwarranted diagnoses, but we should search more carefully for true primary hepatic involvement as well as those conditions wherein secondary hepatic involvement may be overshadowed by the primary disease.

Parenchymal involvement may be mild or moderate, perhaps temporarily, as a manifestation of bacterial invasion: chronic brucellosis may have a severe chronic hepatitis with small areas of necrosis; infectious mononucleosis frequently causes acute liver damage with persistent hepatitis, the same occurs in many cases of atypical pneumonia; the rickettsial diseases produce similar changes. Many spirochetes, syphilis, relapsing fever and Weil's disease have a noticeable predilection for liver tissue. Actinomycosis, histoplasmosis (and other fungi) often attack the liver. And, malaria parasites, amoebae (and other protozoa and metazoa) may result in extensive liver involvement.

(Continued on page 416)

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* Med. Econ. 31:269, Jan. 1954.

Fraternally Yours

"Omnia Gallia Est Divisa"

Yep! and so are the members of the medical profession apparently. One third of those who came to our recent annual meeting did so because they merely wanted to get away from the daily grind; one third came because they had to; this leaves one third who were there because they wanted to!

Out of about 3,500 M.S.M.A. members only around 600 showed up, which was reflected in the rather slow tempo of the whole meeting. We have no ready, facile explanation as to why members stayed away so liberally but, for whatever reason, the effect was most evident.

The House of Delegates got under way Sunday morning with the usual humdrum of business. Guy Magness read the President's message, in which he made full acknowledgement to his predecessor, Claude Bohrer, who died while in office. Dr. Magness stressed that his report really was a recitation of the achievements by our State Association, largely accomplished during Dr. Bohrer's lifetime.

Dr. H. E. Petersen submitted the President-Elect's recommendations and emphasized two phases of activity which he deemed most important for early action. He underscored the need, on a national level, for a uniform approach to the Veterans Administration medical care plan; he also urged the adoption of some method of standardization of medical licensure affecting all those who treat sickness.

Many reports of the various standing and special committees (which have been reprinted) were read and approved. Several new items of business were introduced and the committees appointed to appraise them. These were the main highlights of the first session of the House of Delegates.

On Sunday night, the Woman's Auxiliary held their annual party at the Statler Hotel. From all reports, a large crowd had a big time, with good food, good entertainment and good potables (we hear these latter were supplied by some good unknown "angel").

The scientific session started Monday morning, and considering the skimpy registration, these were fairly well attended, both the general meeting and the sections on medicine and obstetrics. All the scientific sessions this year were on a high level which is a tribute to the hard work of the program committee. It seems a pity, however, that all this preparation both by the committee and by the speakers could not have been enjoyed by a far larger crowd. The "Wet Clinics" went over big and seemed to draw far larger and more appreciative audiences. The noon luncheons seemed to be well attended and the informality of these sessions always seems to make them an outstanding part of any session.

"On-the-Spot Reporting"

Weather in St. Louis grand during most of meeting, unseasonably hot on Monday when the weather-man really turned on the steam . . . Old Timers getting less numerous every year, a few faithful of them remain like McComas, Allee, Baldwin, Denny, Miltenberger, G. Wilse Robinson, Sr., to mention a few at random . . . Miss Hulling's Cafeteria still our number one choice for beaneries; Schuhmacher's folded following fire, really too bad, an old eating landmark gone; found a pseudo-kosher eatery two blocks north of the Jefferson, not bad; St. Louis could stand a good kosher or Deutsher eating place downtown, none we know of . . . Class of '28 (Washington U.) makes us right proud to be one, with Arneson finishing up as St. Louis City Medical Society president and "Gus" Magness as president of the State Association, nice going, fellows . . . New phone books appear in St. Louis, using five numerals now, big city stuff . . . Lots of scuttle-butt in "smoke filled rooms" about this and that, mostly political, like "I hear they are going to run so-and-so and roll so-and-so"; dime a dozen rumors and whisperings were all resolved when Vic Buhler was elected President-Elect; Royse Bohrer was elected Secretary, and Carl F. Vohs was elected Treasurer. Vic Scherman was elected speaker of the House of Delegates . . . And while we are on this matter, we want to tip our hat to the way Vic Scherman kept the business of the House of Delegates rolling in a smooth efficient and completely capable manner, he is one of the best in this business . . . We thought the House of Delegates did right proud in the matter of uniform licensure, a most forward looking step and one which all of our members can regard with great pride; for once our delegates threw aside all pettiness and bickering, they shot the works to let the people of the state of Missouri know that they favor up-grading the health care of all of our people . . . Congratulations! . . . Scientific exhibits scant but good; first, second and third winners were Edwin C. Ernst; James Barrett Brown, Minot P. Fryer and Frank S. McDowell, and Robert W. Bartlett. Technical exhibitors about as usual, winners were Parke, Davis & Company, Pet Milk Company and Ciba Pharmaceutical Products . . . The Past Presidents annual dinner about reached standing-room-only proportions, with almost 450 there . . . Just think of it, 33 of our members entitled to the 50 Year button!

(Continued on page 418)

Missouri Medical Meetings

American Psychiatric Association, Kiel Auditorium, St. Louis, May 3-7, 1954.

Missouri Public Health Association Annual Meeting, St. Joseph, May 6-8, 1954.

School Health Education Workshop, at Central Missouri State College, Warrensburg, July 6-8, 1954.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Kansas City Southwest Clinical Society Conference, Municipal Auditorium, Kansas City, October 4-7, 1954.

Missouri Academy of General Practice, Governor Hotel, Jefferson City, October 27, 28, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p. m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Five hundred and fifty folks, from all over the nation, were in attendance at the Ninth National Conference on Rural Health, sponsored by the Council on Rural Health of the A.M.A. at Dallas, Texas, March 4, 5 and 6. Somebody said that anything can happen in Texas (and usually does)—so rain, sleet and snow accompanied the Conference. In spite of all such side attractions many comments expressed, by both the speakers on the formal program and others in attendance, offer much food for thought. Some of these comments were: Medicine is no longer a job for the doctor alone—it's a problem for the community. The measure of success of any community health effort is in direct proportion to the extent to which all elements of the community participate in that effort. It is an individual's responsibility, acting collectively with others, to see to it that proper health measures are in force.

In some sections of the country, the availability of food of better quality is not taken advantage of because of customs and habits.

There is a misapprehension that all farm wives are either thin and overworked or fat. This is not true—farm people vary in size the same as other segments of the population, although obesity is one of the chief nutritional defects of farm families.

Mechanization has changed the work load in farming the same as it has in other industries, so that the need for calories and energy foods is less.

A problem in isolated areas is the proper preservation of food to prevent loss of nutrition.

If our American farmers lose as much individual freedom as farmers in Government-run nations have lost or never had, food will be scarce in our time. If a government tries to help farmers by paying inefficient farmers to continue inefficient, the most efficient will be destroyed.

If we are to be assured a chance for a broad, general good health, we must concern ourselves with the nutrition of animals that produce our meat and milk, we must become concerned about

(Continued on page 418)

Members in the News

Kansas City Health Director **Hugh L. Dwyer**, M.D., has announced the appointment of James J. Rick as Chairman for the fields trials of polio vaccine.

Directors of the American Cancer Society, meeting in San Francisco, voted $25,000 to Washington University for studies on the relationship between tobacco smoke and cancer. The investigation will be under the direction of Dr. **Evarts Graham** and Dr. **E. V. Cowdry.**

Dr. **Norman Jolliffe** spoke to the Jackson County Health Forum on the problem of obesity.

The budget for the fiscal year beginning May 1 for Kansas City hospitals calls for over $250,000 more than the original appropriation. Among other items requiring the increase was that the *per diem* cost per patient at Kansas City General Hospital was nearly twelve dollars. This cost is considered to be low because of the large wards, mass purchasing of commodities and volunteer professional aid.

U.S.V.A. Hospital, Kansas City, has a new assistant manager, John R. Parrish, who succeeds George F. Grueninger.

The Chillicothe City Hospital is the recipient of a new incubator valued at nearly a thousand dollars, presented by the City Federation of Women's Clubs.

The *Bowling Green Times* reports that **W. B. Wilcoxen**, M.D., of that city, has qualified for specialty in otolaryngology.

The Monday Club of Marshall heard **Victor B. Buhler**, M.D., Kansas City, speak on "Your Health and Your Doctor."

A recent issue of the William Jewell College Alumni magazine carries an article by Dean E. W. Holzapfel in which he points out that by 1960 the health needs of America will require from 25,000 to 40,000 more physicians than the country will have at that time. As a partial suggestion, he states that parents should encourage children to consider medicine as a profession.

The *Ray County Conservator* has published a statement saying in part: "Isn't it an alarming fact that a county with the population and wealth of our own ... doesn't have any kind of a hospital within its bounds? We would probably be safe in stating that it is one of the few counties in this part of the country ... with no hospital facilities. All accident victims ... must be rushed miles away.... Ray County could have a memorial hospital similar to the one at Lexington."

The *Bethany Times* featured an article by Conwell Carlson of the *Kansas City Star* on the career of Dr. **Lake Brewer** of Ridgeway. Dr. Brewer has practiced in Ridgeway since 1908 and is now the only physician in that city.

Wheatley-Provident Hospital, Kansas City, has begun a drive for $750,000 to be used in acquiring a new hospital building.

WIL Sportscaster Stretch Miller spoke to the St. Louis City Hospital Alumni Association at their annual reunion at the Chase Hotel.

The St. Louis A.G.P. heard Colorado physician Paul S. Williamson discuss "Cardiac Psychoneurosis."

The new Professor of Pediatrics at the University of Kansas School of Medicine, effective July 1, is Dr. Daniel C. Darrow, Professor of Pediatrics at Yale. Dr. Darrow will spend most of his time at Children's Mercy Hospital, Kansas City.

The K. U. Clendening Library is the recipient of a one thousand dollar bequest made by the late Dr. Edward H. Skinner.

The American Board of Psychiatry and Neurology has approved the residency program at Kansas City General Hospital for three years. The psychiatric training program is under the direction of Dr. **John H. O'Hearne.**

The problems of rehabilitation, currently under consideration in Kansas City, were surveyed in early spring by Dr. Leonard A. Scheele, Surgeon General of the U. S. Public Health Service.

John L. K. Tsang, M.D., recently of St. Louis, has moved to Springfield.

Kansas City Research Clinic has begun operation of an apothecary shop for the benefit of the clinic patients, along with a training center for fifty students of the University of Kansas City School of Pharmacy.

An evening of entertainment for the members of the Buchanan County Medical Society was arranged by the Auxiliary. The doctors and their wives were guests of the M. K. Goetz Brewing company at a dinner.

Plans are being completed for the Fiftieth Anniversary Celebration of the Buchanan County Medical Society to be held June 2. Honored guests at the meeting will include the four living charter members, Doctors **John M. Bell, Thomas M. Paul, W. E. Pentz,**

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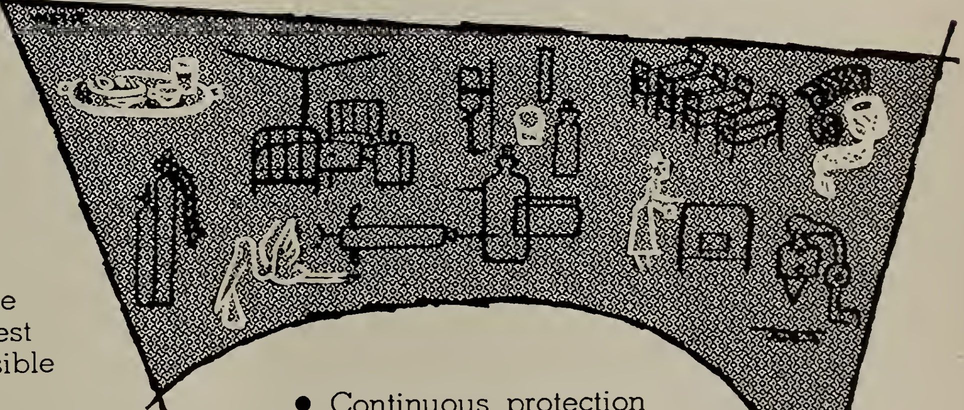

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and **Floyd Spencer** as well as M.S.M.A. President **H. E. Petersen,** M.D.

Patterned after the first tournament held last year in St. Joseph, Pfizer Laboratories have sponsored the second Annual Midland Empire Physicians' Golf Tournament on April 29 at the St. Joseph Country Club.

Members of the Pettis County Medical Society conducted physical examinations on approximately 400 boys participating in Little League activities in Sedalia.

Honored at a dinner meeting, **Pat Dyer,** M.D. and **A. J. Campbell,** both of Sedalia, celebrated the completion of fifty years in the practice of medicine. Speakers of the evening, selected by the honorees, were Dr. **M. Pinson Neal** of the University of Missouri, and Dr. **Roland Kieffer** of St. Louis.

Pete Siegel, M.D., Pettis County Medical Society president, spoke before the Ministerial Alliance at their regular monthly meeting in Sedalia. Dr. Siegel spoke on "Medical Ethics."

Will R. Eubank, M.D., Kansas City, attended the meeting of the National Society for the Prevention of Blindness in St. Louis.

Of interest to MoMedics is the lawsuit for $250,000 filed against several tobacco firms by a St. Louis factory worker blaming his lung cancer on cigarette smoking.

Eighty-one year old retired ophthalmologist, **E. J. Curran,** M.D., of Kansas City, was married to his nurse in West Palm Beach, Florida.

The United Press, in a story datelined Montrose, Colorado, reports that Dr. John A. Frantz is leaving that city to accept a position on the faculty of the University of Missouri Medical School in Columbia. His wife, Dr. Mary Frantz, plans to continue practice in Missouri.

Among participants in the sixth annual Midwest Cancer Conference at Wichita, Kansas, was Ob-Gyn Professor at Washington University, **A. N. Arneson,** M.D.

Two Kansas City urologists have announced their association. **Stoughton F. White,** M.D., and **Berneil W. Andrews,** M.D. will maintain three offices in greater Kansas City.

The regular scientific-business-dinner meeting of the Jackson County Medical Society held late in March, featured papers on the "Management of Chronic Illness and the Aged" by **William L. Mundy,** M.D., **Harold L. Gainey,** M.D., and **Edward H. Hashinger,** M.D.

The M. U. School of Medicine was represented at the annual Congress on Medical Education and Licensure of the A.M.A. by **Roscoe L. Pullen,** M.D., and **W. A. Sodeman,** M.D.

"The Practice of Medicine From a Global Standpoint" was the topic of the annual Phi Beta Pi lectureship at the University of Missouri by **W. A. Sodeman,** M.D.

The opening address at the Annual Meeting of the American Academy of General Practice in Cleveland was given by **Roscoe L. Pullen,** M.D. Dr. Pullen's topic was "Why Train for General Practice?"

The *Chicago American* featured a story indicating the necessity and practicality of banning old diathermy machines, of which an estimated 20,000 are still in service. Among other points, they indicated that diathermy machines could foul up instrument landing signals for aircraft, could block a radar screen, interfere with police and other short-wave communications, and in the event of air attack, could provide a radio beam for enemy bombers to follow. They also pointed out that a radio-controlled guided missile such as the Army's NIKE could be thrown off its course and could be brought to home into the diathermy machine itself. It has also been pointed out that signals from one illegal diathermy have been received several thousand miles away.

Medical director and vice-president of the American Cancer Society, Dr. Charles Cameron, New York, spoke to the Kansas City Academy of Medicine on "Progress in the Study of Cancer."

The opening of the Psychiatric Receiving Center, Kansas City, was delayed from March first to April first due to delay in delivery of materials.

Qualifying examinations for fellowship in the International College of Surgeons will be held May 3 and 4 at Cook County Hospital, Chicago.

The West Central Missouri Medical Society held a social hour and dinner meeting March 11 in Butler. The program, "The Physiological Approach to Anal and Rectal Disorders," by **Wm. C. Schaerrer,** M.D., and "X-ray Interpretations of Lesions of the G.I. Tract" by **James E. McConchie,** M.D., Kansas City, was approved for Grade A credit by the MAGP.

Dr. George W. Diemer, Warrensburg, President of the Central Missouri State College, has been appointed a member of the state campaign committee

LONG BEFORE HOT FLUSHES APPEAR . . .

Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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for the Missouri Division of the American Cancer Society.

Taking office as a director two years after Kansas City Research Hospital was founded, John W. Wagner had completed sixty-six years in that position when he died in March.

The Jackson County Medical Society Auxiliary heard **G. Wilse Robinson, Jr.**, M.D., speak on "Dollars Versus Sanity." Dr. Robinson pointed out that Missouri can afford modern care of its psychiatric patients if the public will arouse the legislature to provide the appropriations needed. He also noted that Missouri now ranks forty-fifth among the states in the amount of tax money for mental patients each year.

At the request of Fulton physician **Patricia Lanier**, M.D., the Callaway Hospital recently received several gifts in memory of the late Frank H. Farnsworth of Webster Groves, the father of Dr. Lanier. Also acknowledged were gifts from the St. Eunice Community Club and from the Women's Missionary Society of the First Baptist Church.

Replacing Dr. **Leopold LaChance**, who has been recalled to the U.S.A.F., **Gladys Sutherland**, M.D., Kansas City, has moved to Centralia.

Bids were opened late in March for construction of the 26 bed Noll Memorial Hospital in Bethany. Directors estimate the $150,000 hospital will be started this spring.

A. R. Maddox, M.D., Sedalia, attended a postgraduate course in pediatrics at the University of Kansas Medical Center.

Hugh E. Stephenson, M.D., Assistant Professor of Surgery at M. U., is the recipient of a $6,000 research grant from the John and Mary R. Markle Foundation.

The current issue of the *Pettis County Medical Society Bulletin* carries an article "Passing Faces Through Thirty Years" by **J. B. Carlisle, M.D.** The article, which reviews the careers of nearly thirty physicians from that area, all of whom are now dead, is a rare mixture of humor, nostalgia and tragedy.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Clay County Medical Society

The Clay County Medical Society met in regular session with the Auxiliary at Sandy's Oak Ridge Manor, North Kansas City, on Tuesday, March 30. Forty members were present.

The speaker was Dr. **Henry M. Hardwicke**, of Liberty, the new Director of the Clay County Health Center. Doctors **O. S. Pate** and **B. W. Andrews** of North Kansas City were responsible for the program.

S. R. McCracken, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met March 11 at the Strand Hotel, Chillicothe. There were twenty-four members, twenty-two auxiliary members, two guests and four pharmaceutical representatives present.

The minutes of last meeting were read and approved.

The scientific program was presented by Dr. **William B. O'Connor**, St. Joseph, who discussed "The Management of Common Skin Diseases as seen in General Practice." The paper was well received and an interesting discussion followed.

The President appointed the following committee on arrangements and entertainment: Chairman, Dr. **Virgil D. Vandiver**; Dr. **C. L. Clark**, Dr. **E. W. Allen** and Dr. **John Martin.**

The President read a paper concerning the death of Dr. **C. H. Reed**, Carrollton. At the conclusion the Society stood with bowed heads in memory of Dr. Reed.

Because of the serious illness of Dr. **Clarence P. Pickett** of Princeton, Dr. **J. M. Perry** was appointed as delegate for Mercer County and Dr. **A. S. Bristow** alternate.

The meeting for April was cancelled in view of the Annual Meeting of the State Medical Association.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society sponsored an evening dinner meeting for the Second Councilor District of the Missouri State Medical Association at the Mark Twain Hotel, Hannibal on Thursday night, March 25.

The scientific program for the evening, under the sponsorship of the Missouri Academy of General Practice, was presented by **Everett D. Sugarbaker**, M.D., Jefferson City. Dr. Sugarbaker gave a most interesting and informative discussion on "Breast Tumors."

Francis R. Burns, M.D., *Secretary*

Chariton-Macon-Monroe-Randolph Counties Medical Society

The Chariton-Macon-Monroe-Randolph Counties Medical Society held a dinner meeting at Moberly on Thursday night, March 11.

The program for the evening was presented by **M. Pinson Neal**, M.D., Professor of Pathology, University of Missouri, Columbia, who spoke on "Diagnostic Drifts, Deceptions and Common Misses."

W. C. Chute, M.D., *Secretary*

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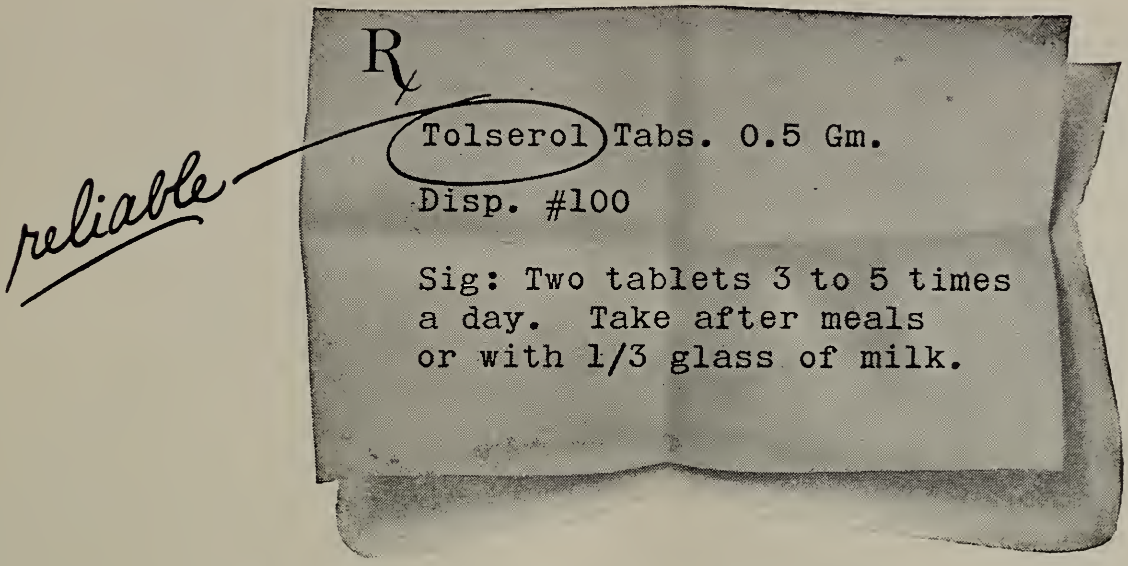

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SQUIBB

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Lincoln-St. Charles County Medical Society

Charles R. Gulick, M.D., St. Louis, spoke on "Detection and Management of Placenta Previa" at a dinner meeting of the Lincoln-St. Charles County Medical Society at Wentzville on Thursday night, March 18.

Informal discussions followed the meeting.

James Dowd, M.D., addressed the meeting.

Fifteen doctors were present to hear this interesting discussion of a most practical problem.

Joseph C. Creech, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

The last in a series of five postgraduate meetings, sponsored jointly by the Missouri Academy of General Practice and the Medical School of the University of Missouri, was held in McAlester Hall at the University on Thursday night, March 25.

Seventy-eight physicians and guests were in attendance to hear two interesting discussions, one by **William A. Sodeman**, M.D., Professor of Medicine, University of Missouri Medical School, on "Management of Hepatitis," and the other, by Mr. Elwyn L. Cady, Lecturer in Law, University of Kansas City, School of Law on "Medical Malpractice." A number of pertinent questions were directed to both speakers following their presentations.

J. L. Washburn, M.D., *Councilor*

Callaway County Medical Society

A dinner meeting of the Callaway County Medical Society was held in Fulton on Thursday night, March 18.

The program for the evening consisted of the discussion of Association matters. Participating in the discussion, besides members of the Society, were **J. Loren Washburn**, M.D., Versailles, Councilor of the 5th District, Mr. T. R. O'Brien, St. Louis, Executive Secretary of the State Medical Association, and Mr. Ray McIntyre, Field Secretary. There was fourteen in attendance at this session.

R. N. Crews, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Pettis County Medical Society

On Wednesday night, March 17, the Pettis County Medical Society honored two of its members who were, this year, completing fifty years in the practice of medicine, **A. J. Campbell**, M.D., and **D. P. Dyer**, M.D., both of Sedalia. This affair was held at the Old

Speakers are recipients of 50 year awards.

The president presents plaques to Drs. Campbell and Dyer.

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Dinner preceded the formal meeting.

Missouri Homestead and began with a social hour where many friends of the two doctors from distant parts met again to renew friendships. Following this enjoyable period, one of the Old Homestead's famous chicken dinners were served. Some seventy-five doctors and guests did justice to this feature of the evening.

The main program of the evening was opened by Dr. **P. V. Siegel**, President of the Society, by giving a few pertinent remarks as to the purpose of the occasion. The two main speakers for the evening were **Roland S. Kieffer**, M.D., St. Louis, who spoke on "The Changing Face of Medicine," and **M. Pinson Neal**, M.D., Columbia, who discussed "Service and Reward."

Dr. Siegel presented a plaque, from the Society, to Drs. Campbell and Dyer in recognition of their fine service to humanity and to the profession. Mrs. Campbell and Mrs. Dyer were also called in to receive flowers and their share of congratulations. Dr. Campbell and Dr. Dyer were both called upon to give rebuttals and as usual were not found wanting in this respect. Many friends of both doctors from beyond the immediate vicinity were present. In addition, a good attendance was on hand from other Societies in the Pettis County area.

Carl D. Siegel, M.D., *Secretary*

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society and its Auxiliary was held Thursday

West Central Society meeting of March 11.

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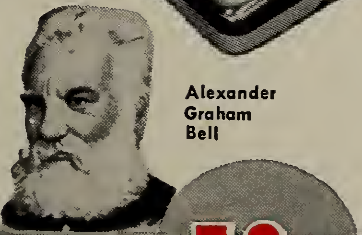

Alexander Graham Bell

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Successor to *Western Electric* Hearing Aid Division evening, March 11, at Butler. A pleasant social hour preceded the dinner.

Following dinner the ladies adjourned to the home of Mrs. Carter Luter leaving the doctors to relish the scientific program which was furnished by the Missouri Academy of General Practice: **William C. Schaerrer**, M.D., Kansas City, spoke on "The Physiological Approach to Anal and Rectal Disorders"; **James E. McConchie**, M.D., Independence, discussed "X-Ray Interpretations of Lesions of the G.I. Tract," with film demonstrations.

Following the scientific program Dr. **C. G. Stauffacher**, Councilor, presented important Association business for discussion by the group. Thirty-six were in attendance including doctors, wives and guests.

O. B. Barger, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

E. Humber Burford, M.D., St. Louis, spoke on "Common G.U. Problems in General Practice and Their Management" on Thursday night, March 25, at a dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society at Rolla.

As usual the success of the meeting was enhanced by the presence of many of the doctors' wives. Members of the Academy of General Practice who attended this meeting, are entitled to formal credit.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner at the City View Cafe in Mountain Grove, Wednesday night, March 17, with the following members and visitors present: Drs. **R. W. Denney**, **H. G. Frame**, **S. W. Connor** and **A. C. Ames**, Mountain Grove; **Garrett Hogg, Jr.**, Cabool; **T. J. Burns** and **J. B. Kelley**, Houston; **M. B. Perkins**, **Paul A. Davis** and **H. W. Miller**, Willow Springs; **G. T. Stewart**, Mountain View; **Rollin H. Smith**, West Plains, and **Wm. J. Park** and **Wm. B. Maddux**, Springfield, and the wives of several. After dinner the ladies went home with Mrs. Connor for the evening and the doctors went to the office of Dr. Connor, when the meeting was called to order by the president, Dr. Perkins.

Dr. Park spoke on "Pregnancy in Patients With Diabetes" and Dr. Maddux spoke on "Some Gastric Disorders and Troubles in the Splenic Flexure of the Colon Which Are Often Mistaken for Heart Disease." Both speakers brought out several useful points. Thanks of the Society were given the speakers from Springfield and they were excused and the meeting was resumed for a short business session. The secretary read parts of the minutes of the last two meetings and reported some other points of business and then presented the application of Dr. **G. T. Stewart**, Mountain View, for membership, who was elected. A communication from the Councilor, Dr. Summers, Lebanon, was then read and the question of a clinic for crippled children was presented for approval, but after some discussion it was tabled without a vote being taken. It was then voted to omit an April meeting and hold the May meeting a week later than usual, on May 26 at Cabool.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

A joint meeting of the Butler-Ripley-Wayne, Dunklin and Pemiscot County Medical Societies was held on Wednesday night, March 25, at the Veterans Hospital in Poplar Bluff.

The program for the evening was furnished by the Missouri Academy of General Practice and presented **James F. Dowd**, M.D., Plastic Surgeon, St. Louis, "Surgical Treatment of Malignancies of the Head and Neck," and **Robert Dean Woolsey**, M.D., Neuro-surgeon, St. Louis, "The Management of Head Injuries."

Twenty-two physicians heard this top notch program. An extended informal discussion of both subjects was carried on following the close of the regular meeting.

S. L. Gernstetter, M.D., *Secretary*
Butler-Ripley-Wayne County Medical Society

Mineral Area County Medical Society

A meeting of the Mineral Area County Medical Society and surrounding counties was held Thursday night, March 25, at the State Hospital, Farmington. The program for the evening was presented by **Joseph E. Von Kaenel**, M.D., St. Louis, who discussed "Infections and Injuries of the Hand." Dr. Von Kaenel gave an interesting and instructive presentation which was followed by considerable general discussion.

Jack Mullen, M.D., *Secretary*

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News From the Medical Schools

Missouri University

Faculty: Two new department heads have been chosen at the University of Missouri School of Medicine. Robert L. Jackson, M.D., Professor of Pediatrics, Iowa School of Medicine, national authority on growth, metabolism, nutrition and especially diabetes, has been appointed Professor and Chairman of the Department of Pediatrics, effective September 1. Clarence D. Davis, M.D., Department of Obstetrics and Gynecology, Duke University School of Medicine, has been appointed Professor and Chairman of the Department of Obstetrics and Gynecology, effective July 1. Dr. Davis is a recognized authority on endocrine gynecology and is pursuing research in psychosomatic gynecology and infertility.

Honors: Hugh E. Stephenson, Jr., M.D., Assistant Professor of Surgery, has been appointed a Scholar in Medical Science by the John and Mary R. Markle Foundation of New York City. Under this grant, the School of Medicine will receive $6,000 annually for five years to support research and instructional development of Dr. Stephenson, whose special interests are in cardiovascular surgery.

Postgraduate: The monthly meeting of physicians in Central Missouri (Missouri Academy of General Practice) was held in Columbia, February 25, with a symposium on "Water Balance" by Dean R. L. Pullen, Dr. Dallas K. Meyer, Associate Professor of Physiology, and Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery. On February 26, Drs. W. A. Sodeman, R. L. Pullen and Will Fleming, Jr., President of the Missouri Heart Association, appeared on KOMU-TV in support of the Missouri Heart Association drive. On March 25, the School of Medicine, the Department of Physical Education and the Adult Education and Extension Service presented an all day symposium on "The Management of Athletic Injuries," followed by an evening session of the Missouri Academy of General Practice on "Hepatitis," by Dr. W. A. Sodeman, and Mr. E. L. Cady, the University of Kansas City School of Law on "Medical Malpractice."

St. Louis University

A one day symposium by the Department of Rehabilitation, St. Louis University School of Medicine, was held April 7 in the clinical auditorium of Firmin Desloge Hospital.

The morning session was devoted to "Orientation to the Rehabilitation Program," Dr. Otokar Machek, Instructor in Orthopedic Surgery; "Rehabilitation Aspects of Services in a General Hospital," Dr. D. Elliott O'Reilly; "Rehabilitation Aspects of Chest Diseases," Dr. William A. Werner, Instructor in Internal Medicine and Medical Director of Mt. St. Rose Hospital; "Rehabilitation Aspects of Heart Disease," Dr. John W. Berry, Instructor in Internal Medicine; "Reha-

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Treatment of the "problem drinker" is more than a sobering-up process; it is a rehabilitative procedure which must be tailored to the needs of the individual.

Years of intensive research and specialized clinical experience enable us to follow through in all phases of modern restorative treatment—gradual withdrawal, physical rehabilitation, re-orientation and re-education.

You may refer female as well as male patients—we are also equipped to care for narcotic or barbiturate addiction. Moderate rates; treatment period sometimes shortened to just two weeks.

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bilitation Aspects of Neurology," Dr. Louis Tureen, Assistant Professor of Clinical Neurology and Psychiatry; "Rehabilitation Aspects of Urology," Dr. Sol Heineman, Assistant in Urology; "Rehabilitation Aspects of Peripheral Vascular Diseases," Dr. James E. Lewis, Assistant Professor of Surgery; "Rehabilitation Aspects of Neurosurgery," Dr. Edmund A. Smolik, Associate Professor of Clinical Surgery; "Rehabilitation Aspects of Arthritis," Dr. Jack Zuchner, Instructor in Internal Medicine, and "Rehabilitation Aspects of Cerebral Palsy and Amputations," Dr. O'Reilly, Director of the Department.

The afternoon program presented a discussion on "Rehabilitation Aspects in Nursing," Sister Mary Susanne, S.S.M., Dean of the School of Nursing; followed by "Rehabilitation and Social Work," Mrs. Kay Petersen, social worker; "Integration of Vocational and Physical Rehabilitation," Hardin A. Collins, United Mine Workers; "Training and Placement," Eugene J. Coon, United Mine Workers; "State Vocational Rehabilitation Service," Paul Kinder, Missouri State Vocational Rehabilitation Service; "Speech Disorders Treatment," Mrs. Mary Lou Rush, Assistant Professor of Speech, and "Paraplegia and Hemiplegic Case Demonstrations," Dr. Machek.

Washington University

Research Grant: A grant of $2,000 to support one year's research in asthma at the School of Medicine was awarded by Armour Laboratories, Chicago, to Dr. Samuel C. Bukantz, Associate Professor of Medicine, and Assistant Dean and Chief of the Division of Allergy. The study will probe the nature of viscous bronchial secretions occurring in asthma, the initial phase concerning fundamental chemical characteristics of the secretions, and will also deal with the effect of various enzymes in treatment of the disease.

Meeting: The Washington University Medical Society met on March 17 with three papers read on research conducted by Dr. Robert E. Furchgott, Associate Professor of Pharmacology; Dr. Ruth Steinkamp, National Cancer Institute trainee and fellow in medicine (hematology); Reubenia Dubach, research associate in medicine; Dr. Carl V. Moore, Professor of Medicine and new Dean of the Medical School, and Dr. Bernard Becker, Professor and head of the Department of Ophthalmology.

A. O. A. Elects: The Medical Society meeting was preceded by the annual initiation dinner of Alpha of Missouri chapter of Alpha Omega Alpha, national medical honor society, when induction of eight senior medical students, two juniors, two faculty members and a University alumnus took place. Guest speaker was Dr. Earl L. Burbridge, research director, Upjohn Laboratories, Kalamazoo, Mich., new alumnus member. Membership was conferred on Dr. Bernard Becker, and Dr. Edward W. Dempsey, Professor and head of the Department of Anatomy, received honorary membership.

℞: Common Sense

Antihistaminics

J. D. Rising, M.D.

It comes on good authority that two things can be depended upon to sell magazines: Sex and medicine. While most physicians are heartily in favor of both, it is often disconcerting to find the lay press taking the bit in its teeth and running off with our therapeutic applecart. With their usual gusto, the editors of the nation's newspapers and magazines capitalized on the advent of the antihistaminics in their accustomed dramatic and irresponsible manner. The result was an immediate demand, by patients, for these wonder drugs in the treatment of everything from a cold in the head to itching feet. Within the span of a few months, the antihistaminic business had grown into a multimillion dollar industry, and every pharmaceutical manufacturer was climbing on the gravy train.

The number of drugs in this group increased so rapidly that physicians were unable to keep up with them, and the over-the-counter sale of antihistaminics for the prevention and treatment of "the common cold" became tremendous. The sale of ordinary cold tablets suffered a staggering blow, and their manufacturers hastened to add at least token amounts of antihistaminics to the product in self defense.

The multiplicity of preparations available, while undeniably confusing, is not an unmixed curse because a patient may be sensitive to some members of the group, but not to others. Likewise, if tolerance develops to one drug, a switch to another may restore therapeutic responsiveness.

What is the place of the antihistaminics in therapeutics? How do they work? What can we expect from them? In the first place, they are palliative rather than curative agents which act by competing with histamine for the same site of action. This means that they can, to some extent, prevent the unpleasant symptoms which histamine causes when it is released in excessive amounts. We can expect, then, that they will be of value in the relief of hay fever and allergic rhinitis, atopic eczema, urticaria, angioneurotic edema, some drug reactions and the pruritus and edema of serum sickness (but not the fever or arthralgia). They are disappointing in asthma, but this may well be because they do not concentrate in the lung sufficiently to counteract the large amounts of histamine liberated at that site. Recent studies on an antihistaminic with the unique ability to concentrate in the lung give hope that we shall soon have a valuable adjunct to the therapy of asthma. This product is not yet available.

Appetite Poor?

...here's a practical, natural stimulant for an immediate response

THROUGHOUT the history of medicine, wine—the classic beverage of moderation—has been widely but empirically considered to be a reliable stimulant to the sense of taste.

During the past few years, as part of a scientific study of wine chemistry and physiology, American medical investigators have approached this matter objectively. They have conducted extensive laboratory and clinical tests, and learned that there is indeed a physiological rationale for the use of wine in anorexia*.

Unlike alcohol itself, which depresses appetite and olfactory acuity, wine has a striking and often valuable effect as a stimulant. Largely because of its natural tannins and organic acids, table wine heightens the ability of a patient to detect faint aromas, to enjoy the flavors of food, and to partake more substantially of needed nutriments.

In anorexic patients, the prescription of such wine in moderate amounts has quickly brought a significant rise in caloric intake and a welcome increase in body weight.

Wine's mild relaxant qualities, observed by many generations of physicians, may also be important in the care of many patients whose lack of appetite stems primarily from tenseness and anxiety.

In addition to its physiological effects, wine can bring an incalculable psychological boost to the patient by adding a touch of color and grace to his diet—by making him feel that he is having "something special" —that he is being treated as a person rather than as a case.

The excellence of California's wines makes them appealing to all, including your connoisseur patients. Their economy makes it possible to prescribe these appetite-stimulating beverages without burdening the patient's budget. Wine Advisory Board, 717 Market Street, San Francisco 3, California.

*Research information on wine is available upon request.

The actions of drugs in this group are by no means clear cut. It should be remembered that they share properties with atropine and other anticholinergic drugs. The antihistaminics have many atropine-like actions, and, by the same token, the anticholinergics have antihistiminic effects. Furthermore, in addition to their main actions, these drugs have side-effects that differ within the group. While these may cause some difficulties, the alert physician can often turn them to his cause. He can, for example, put the sedative effects of benadryl, pyribenzamine or neo-antergan to good use in the treatment of nervous patients. He may, in fact, give benadryl as a pure sedative without regard for its primary actions.

If, on the other hand, a patient with hay fever finds that the sedative effects of these drugs interfere with his necessary activities, one of the mildly stimulant antihistaminics, such as antistine, neohetramine or thenylene may be prescribed.

Antihistaminics are customarily given orally in dosage of 12.5 to 100 mg., except chlor-trimeton, which is used in 2 to 4 mg. dosage. Intravenous administration is for rare emergencies. Some aerosols are also available, but their usefulness has not been established for asthma. Topical application often affords relief for patients who have pruritus from atopic dermatitis, neurodermatitis and contact dermatitis, but is less successful in cases of "id" reactions, pruritus ani and vulvae. The local use of these drugs may lead to sensitization, therefore the physician should be alert to such an eventuality.

Because of the large number of histamine-antagonizing agents available, it seems advisable to restrict ourselves to those that have been accepted by the A.M.A. Council on Pharmacy and Chemistry. The following tabulation is a brief guide to these. The prices are not listed because the active competition in the field has maintained a reasonable price level.

After all the hue and cry, the claims and counterclaims, have subsided I think we can safely say that the antihistaminic drugs are a valuable addition to our therapeutic armamentarium. We will do well to recognize their limitations as well as their possibilities, and will certainly not kid ourselves that they can abort or cure such a viral infection as the "common cold." They afford a measure of relief to these patients on occasion, but they will give even more relief if the disease is allergic in nature. Even here they relieve but do not cure.

Nonproprietary Name	*Proprietary Name*	*Dosage Form*
Antazoline HCl	Antistine	Tab. 100 mg.
Chlorocyclizine HCl	Di-Paralene	Tab. 25-50 mg.
Chloromethapyrilene Cit.	Chlorothen	Tab. 25 mg.
Chlorprophenpyridamine Maleate	Chlor-Trimeton	Inj. 2 mg./cc.
		Syr. 2 mg./tsp.
		Tab. 4 mg.
Diphenhydramine HCl	Benadryl	Cap. 25-50 mg.
		Elix. 10 mg/tsp.
		Inj. 10 mg./cc.
Doxylamine Succinate	Decapryn	Tab. 12.5-25 mg.
		Syr. 5 mg./tsp.
Methaphenilene HCL	Diatrin	Tab. 50 mg.
Methapyrilene HCl	Semikon	Cream 2%
		Tab. 50-100 mg.
	Thenylene	Cream 2%
		Tab. 25-50-100 mg.
Prophenpyridamine	Trimeton	Tab. 25 mg.
		Cream 3%
		Elix. 8 mg./tsp.
Pyrilamine Maleate	Neo-Antergan	Tab. 25-50 mg.
	Paraminyl	Tab. 50 mg.
	Pyrilamine	Cream 2%
		Syr. 10 mg./tsp.
		Tab. 25-50 mg.
	Stangen	Tab. 25-50 mg.
	Statomin	Tab. 25 mg.
Thonzylamine HCL	Neohetramine	Cream 2%
		Syr. 25 mg./tsp.
		Tab. 25-50-100 mg.
Tripelennamine Cit.	Pyribenzamine	Elix. 30 mg./tsp.
Tripelennamine HCL	Pyribenzamine	Cream 2%
		Ointment 2%
		Tab. 50 mg.

Crime May Pay . . .

There is an old bromide that goes "You can't get away with murder." It's generally accurate too, but an outdated coroner law in Missouri does tend to make things easier. Despite efforts since 1926 by various enforcement agencies and crime commissions, the old statute remains on the books.

At the next session of the Legislature, the Kansas City Crime Commission again will try to get the law modernized to provide that the county coroner can call for an autopsy on his own authority. . . . At the moment the coroner's hands are tied until or unless he can get permission of the deceased's next of kin. . . .

. . . The present provisions are clearly an obstruction to justice. They have been outmoded by the times and should properly be amended.—Editorial, *Kansas City Star.*

50 *and seven*

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Letter to Missouri Medicine

March 25, 1954

To the Editor:

I had hoped not to bother you with any more statements from me about the International College of Surgeons but the blast from Dr. Max Thorek in the February issue of MISSOURI MEDICINE is so outrageous that it seems advisable for me to answer it.

(1) Dr. Thorek says, "The statement that a suit is pending against the American College of Surgeons or against Graham, instituted by the International College of Surgeons, is not true. No such suit exists or ever existed." This statement is evidently in rebuttal of one that I made in your December issue as follows: "There is still hanging over the American College of Surgeons and myself as the Chairman of the Board of Regents a suit for damages threatened by the International College of Surgeons. I believe this is the first time in the history of American medicine that one organization has threatened suit against another one." The only conclusion one can draw from Thorek's statement is that he wishes the reader to think that the American College of Surgeons and myself were never threatened with a suit by the International College of Surgeons.

The facts in the case are these: In December, 1951, an attorney by the name of Norman Littell, of Washington, D. C., telephoned Dr. Hawley at the office of the American College of Surgeons in Chicago and told him that he was the general counsel of the International College of Surgeons and that he intended to bring a suit for triple damages against the American College and me unless we retracted the resolutions passed by our Board of Regents on December 3, 1951. These resolutions condemned the formation of the certifying boards in general surgery and the surgical specialties which had been set up by the International College in competition with the regularly accredited and functioning boards. Mr. Littell was referred to our attorney, Mr. Vedder, to whom he told the same story. We have never retracted the resolutions, but the International College has given up its boards. However, we have never been notified that the threat of a suit has been withdrawn. Other important members and officers of the International College know that we were threatened with a suit even if Dr. Thorek does not know it. I shall be glad to mention their names if Thorek wants me to do so.

(2) It is fantastic that Dr. Thorek should claim to know better than I do what office I hold in an international organization. It pains me to have to tell him he is wrong. Despite his attempt to correct me the office I hold is President of the 16th Congress of the Societe Internationale de Chirurgie which will convene in 1955 at Copenhagen. He states, with apparently a strong desire for accuracy, that there is no such organization as the International Congress of Surgeons and that actually I was elected "President of the International Surgical Society in October 1953." To correct him again I shall say that the International Surgical Society has a permanent president who is Professor Robert Danis of Brussels. Also my election as President of the 16th Congress occurred in September rather than in October. Now we have it straight.

(3) Dr. Thorek's statement that "thousands of Fellows of the American College of Surgeons and American Boards of Surgery are also Fellows of the International College of Surgeons" is difficult to rebut because, for reasons known only to itself, the International College of Surgeons does not publish a list of its members. I should appreciate very much seeing the names of the "thousands of Fellows of the American College of Surgeons who are also Fellows of the International College of Surgeons."

(4) A vicious charge by implication is made against me that I have attempted to steal from Dr. Rudolph Nissen, now of Basel, Switzerland, the honor of performing the first pneumonectomy. Dr. Thorek even states "it would fortify Dr. Graham's reputation if he would relinquish to Professor Nissen any honors he has received on that score." In my first article on the subject of pneumonectomy ("Successful Removal of an Entire Lung for Carcinoma of the Bronchus," J.A.M.A. **101**:1371-1374 (Oct. 28) 1933) I made the following statement: "There are two instances in which an entire lung has been removed for bronchiectasis, one by Nissen of Berlin and the other by Haight of Ann Arbor, Michigan. In both the latter cases, however, the lung was allowed to slough out after ligation of the hilus." In subsequent publications I have taken pains to state that my contribution was the first total pneumonectomy for cancer and the first one done for any reason in a single stage. I am at a loss to understand what honors I should relinquish to Nissen. After all, the operation of pneumonectomy is considerably different from Nissen's procedure of merely ligating the hilus and allowing the lung gradually to slough out.

(5) Dr. Thorek ends his communication by a little Pollyanna-like sunshine: "Finally, whatever Dr. Graham chooses to do or say, both the American College of Surgeons and the International College of Surgeons will continue harmoniously in their constructive work —one on a National, the other on an International basis—in the American spirit of good will and fair play."

This sentimental expression brings up the thought of where is "the American spirit of good will" in the threat of a lawsuit?

Finally, it might be of some educational value to those who know very little of the beginnings of the International College of Surgeons to quote a set of resolutions adopted on May 8, 1936, by the American members of the International Society of Surgery:

"Since it has come to the notice of the American Committee of the International Society of Surgery, and of the Fellows of the International Society in the United States, that a movement is on foot to establish a new international organization, with headquarters at Geneva (Switzerland), which has for its alleged purpose the promotion and cultivation of the science of surgery by the joint cooperation of the leading surgeons of the world, in the interests of common humanity; and

"Whereas, the identical purpose in its essential principles and functions has been fulfilled for the last thirty-two years by the International Society of Surgery, a thoroughly representative world organization, exclusively devoted to the promotion and advancement of Surgery in all its cooperative international relations; and

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"Whereas, it has been reliably reported that this newly constituted organization has been represented as connected and supported by the Rockefeller Foundation, of New York; and

"Whereas, on direct inquiry the Rockefeller Foundation has denied any knowledge of, or relationship to, the so-called International College at Geneva; and

"Whereas, this new and self-constituted enterprise has not originated in response to any known appeal or expressed need from any of the recognized or representative surgical societies of Europe or America:

"Be it hereby resolved:

"That the American Fellows of the International Society, who constitute one of the largest units of that organization and are here in large representative attendance, do now, and in meeting assembled, emphatically protest against the creation of a new and self-constituted international organization or project that is calculated to injure the most vital interests of the International Society to which they belong and owe allegiance; and in furtherance of this protest all the Fellows of the International Society in the United States are urged to withhold their endorsement, support or alignment with the so-called International College of Surgeons at Geneva, or its ramifications in the United States."

I hope I shall not have to call upon your good nature again to devote space to this matter. Yet I think it is important to have the facts straight.

Cordially yours,
Evarts A. Graham

Among Ourselves

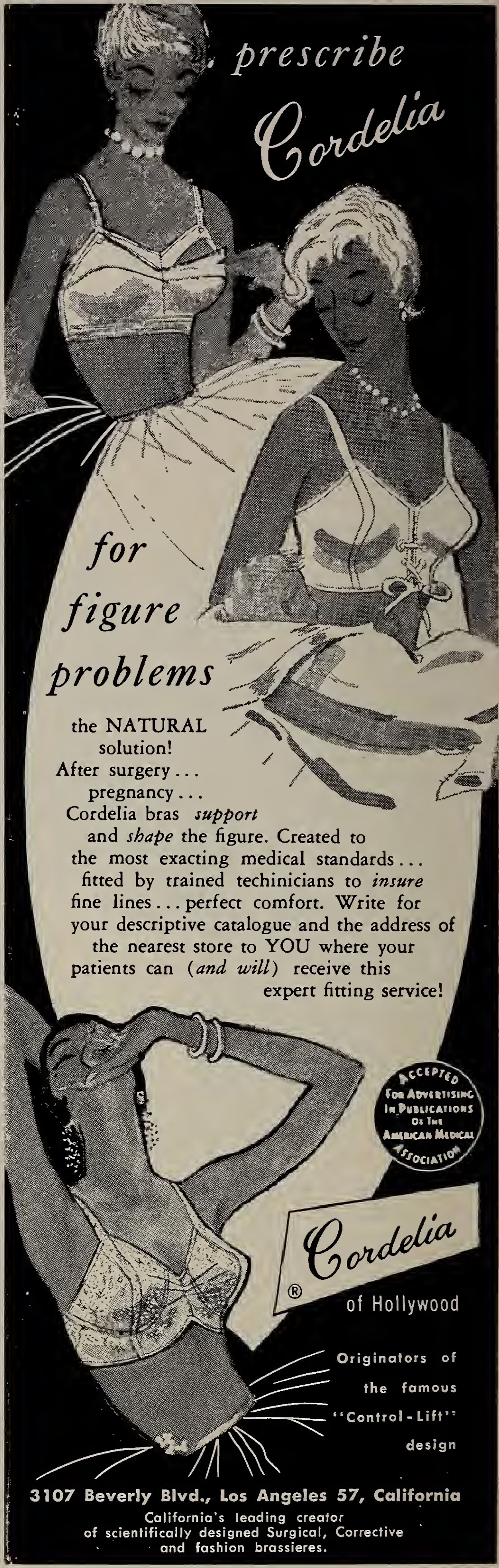
(Continued from page 395)

In many clinical conditions with increased hemolysis (pernicious anemia, sickle-cell anemia, hereditary spherocytosis, Hodgkin's disease, leukemia) the over-loading of the liver excretory mechanism disturbs its functional capacity.

Besides the well-known hepatotoxic agents, thyrotoxicosis, severe burns and toxemia of pregnancy damage the liver, as does chronic passive congestion due to heart or lung disease. Metabolic disturbances, as the fatty infiltration in diabetic or alcoholic persons may also occur with other chronic diseases such as pellagra. Amyloid disease causes a deposit of glyco-proteins, hemachromatosis of iron, and reticuloendotheliosis of cholesterol, all these result in depressed hepatic function.

Because of such diverse hepatic functions, no one laboratory test is a comprehensive measure of hepatic derangement. One must select a minimum number of appropriate tests, one for each function, and base his interpretations upon a series of observations. Careful consideration and choice of tests will insure a fairly accurate profile of liver physiology and may uncover minor deviations from normal, not otherwise detectable.

Allen I. Herman, M.D.



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Doctors' Day Proclaimed by Governor Donnelly

Proclamation

Whereas: Our State and Nation are greatly indebted to the skilled and tireless physicians who labor long hours to care for our sick, and who are constantly engaged in study and research to prevent human misery and suffering, and

Governor Phil M. Donnelly hands proclamation of Doctor's Day to Mrs. John O'Connell, Overland, accompanied by Mrs. Harry M. Gilkey, Kansas City, (left) past presidents of the Woman's Auxiliary to the Missouri State Medical Association, and Mrs. H. V. Guhleman, Jefferson City, president of the Cole County Woman's Auxiliary.

Whereas: It is fitting that from time to time merited tribute should be paid to these professional guardians of the health of our country,

Now, therefore, I, Phil M. Donnelly, Governor of the State of Missouri, do hereby proclaim

Tuesday, March 30, 1954
as
Doctors' Day in Missouri

and call upon all citizens of our State to remember and, in an appropriate manner, express their appreciation and gratitude on that day, to the physicians who safeguard our health and well-being.

In testimony whereof, I have hereunto set my hand, and cause to be affixed the great Seal of the State of Missouri, in the City of Jefferson, this 15th day of March 1954.

Attest: PHIL. M. DONNELLY, *Governor*
WALTER H. TOBERMAN, *Secretary of State*
WILL DAVIS, *Chief Clerk.*

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Henry A. Dollear, M.D., Physician

Musings of the Field Secretary

(Continued from page 397)

hunger signs in crops, and we will take a new interest in productive soils.

Why do I attend the American Medical Association's Rural Health meeting year after year? said Mrs. Maggie Brown, Marshfield, Missouri, President of the Webster County Health Council, who has attended five of the nine A.M.A. meetings: I need the information which I get at these meetings to take back to help people in the Ozark hills of Missouri. I condense a report for those people in thirty-two Missouri counties. The meetings pinpoint the health needs in rural areas all over the country and the information is most enlightening to me.

Said Mr. Chester Starr, Jefferson City, Missouri, a representative of the Missouri Farm Bureau Federation, who has attended eight of the nine meetings: We want to do everything we can in Missouri to better health conditions for the farmer. We found at the first few meetings that there was misunderstanding between physicians and the farm people. This created an air of suspicion and antagonism. The turbulence soon disappeared as each group began to understand the other's problems. Now there is a good working relationship for the common interest in creating better health conditions for farm people everywhere.

W. A. Broyles, M.D., Bethany, Missouri, represented the Committee on Rural Medical Service of the Missouri State Medical Association at the Dallas Conference.

Plans seem to be well under way for the 50th Anniversary celebration of the Buchanan County Medical Society to be held Wednesday, June 2, at the Moila Temple, St. Joseph. The dinner will be for members and their wives. To be honored at the meeting are the four living charter members, Dr. John M. Bell, Dr. Thomas M. Paul, Dr. W. E. Pentz and Dr. Floyd Spencer. Also, recognition will be accorded to Dr. H. E. Petersen, who is currently serving, as the sixth member of the Buchanan County Society, in the capacity of President of the Missouri State Medical Association.

Fraternally Yours

(Continued from page 396)

God Bless You, Gentlemen! . . . As usual the ladies looked mighty fine in their finery, as did those among the men folks who took the trouble to spruce up, this gimmick always a great thrill to your reporter . . . Father Reinert, principal speaker on schools, school teachers and education, mighty impressive; too bad every one in the U. S. can't absorb and act on his philosophy. . . . Despite the disappointing registration, the show went off in reasonably good shape thanks to efficient program and planning committees, and due to the smooth functioning of our executive office staff . . . We've got a good bunch of officers, some good arbeits ahead of us as a State Association; let's get in back of them and push!

V. T. W.

Book Reviews

Operative Surgery, by Guy W. Horsley, B.S., M.D., F.A.C.S., Associate Professor of Surgery, Medical College of Virginia; Attending Surgeon, St. Elizabeth's Hospital, Richmond, Va.; and Isaac A. Bigger, M.D., F.A.C.S., Professor of Surgery, Medical College of Virginia; Surgeon-in-Chief, Medical College of Virginia Hospitals, Richmond, Va. Volume I and Volume II. Illustrations by Helen Lorraine. Sixth Edition. C. V. Mosby Company, St. Louis. 1953. Price $30,00.

The sixth edition of this two volume text on operative surgery represents a timely and necessary revision of the previous edition now thirteen years old. The authors have recognized this need with the great advances in surgical technic, antibiotic adjuncts and fluid, electrolyte and blood regulation which have evolved. The subject matter of these volumes is admittedly extensive, and all the surgical specialities are given thorough consideration with the thought that so-called "general" surgery may itself be undergoing a more than desireable and useful specialization and restriction.

Perhaps in particular sections of the book an increase in the number of illustrations and more detail in the technical description might be desirable for the advanced surgical student, but as a whole it would be extremely difficult to match the tremendous amount of material covered. Short introductory sections on the physiologic aspects of the various systems are quite useful and well done. The style is most readable, to the point and the material is up to date.

J. C. P., Jr.

The Conception of Disease. Its history, Its Versions and Its Nature. By Walther Riese, M.D. New York. Philosophical Library. 1953. Pride $3.75.

This is a little book of some 120 pages, including an index. The author traces the various concepts of disease back to their historical sources, analyzing the original and first conscious versions, going back to them, and also anticipating them, according to the laws of reason, which do not coincide with the laws of history.

He takes up various conceptions of disease, the Stoic, the Platonic, the Anthropological, comprising the Hippocratic thesis, and Rousseau's Antithesis; the Moral Conception of Disease, Disease and Art, the Historial or Hippocratic Conception of Disease, the Natural History of Disease, the Galenic or Physiologic Conception of Disease; the Anatomical Conception of Disease, according to Leonardo da Vinci, Vesalius, Morgagni, Bichat, and Virchow. Next, he takes up the Etiologic and Social Concepts of Disease, the Psychologic Conception and Ontologic Conception, and the Biographic Conception. He concludes with an epilogue, Disease and Health.

This is an interesting little book, and certainly will be much appreciated by physicians interested in disease conceptions.

R. B. H. G.

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MISSOURI MEDICINE

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Curiosa et Trivia

William B. McCunniff, M.D.

Statisticians report that in the German Federal Republic there are today 4,543 physicians who are either unemployed or working in jobs foreign to their professions.

U.S.V.A. Hospital, Kansas City, between October 1, 1952, and February 10, 1954, admitted 5,647 patients, with a 490 patient capacity. In the same city, in the same period, a private hospital with a bed capacity of approximately 325, admitted 17,888 patients.

In 1952 industrial accidents injured two million persons and killed 15,000 more. By comparison, at home there were 4,300,000 persons injured and 29,000 killed. Three out of five home deaths (of which 75 per cent occurred inside the house) resulted from falls, one in seven from fires, and one in ten from suffocation or strangulation. In four out of five cases, the victim was under 5 or over 65, and females died in a proportion of three to two over males.

As far as is known, the first sanitarium for the treatment of physical ills with a psychic background was established on an island near Greece by a medical man. He carried a staff, wore a distinctive costume, equipped the sanitarium with hot and cold baths, expert masseurs and used various rituals. In the belief that their tongues had healing properties, harmless serpents were employed. One such serpent entwined about Hippocrates' staff became the emblem of his craft.

A Doctor Quimby, who lived near Boston, was scoffed at by fellow doctors when he wrote of the relation of mental attitude to physical illness. He grew silent, but on his deathbed left his papers to his interested housekeeper, afterwards known as Mary Baker Eddy.

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What Is Your Hobby Doctor?

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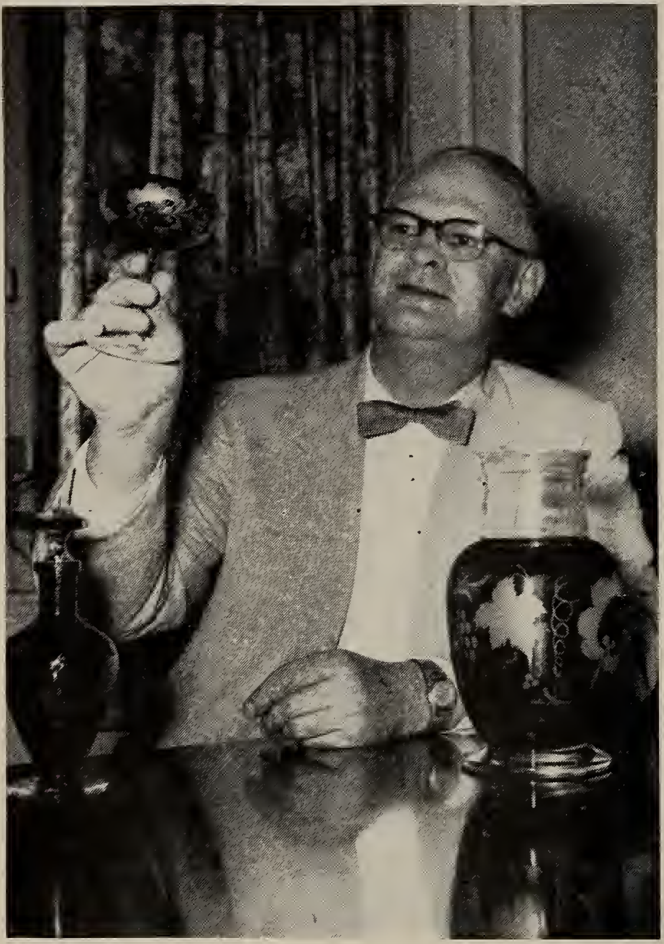
Sidney W. Scorse, M.D.

"Ambition and unusual occupations frequently make strange bedfellows. That was the case with me. The ambition was to be a doctor, but circumstances were not favorable. It was necessary that I get a job and make money for my premedical and medical education. While going to night high-school, I had a job in a glass engraving factory where I naturally learned the trade—not an easy one to learn, but a means to an end. At the present time, however, it is a very pleasing and profitable hobby.

"Glass engraving, *per se,* is becoming a lost art. It should not be confused with the etching of glass. At least, don't insult a glass engraver by telling him you loved his etching—them are fighting words! Etching is done with hydrofluoric acid; nor is it 'cut glass.' 'Crystal glassware' is the term usually applied to engraved glass.



"Glass engraving is done by moving a glass object, such as a goblet, a fingerbowl, a plate, or what have you, in a certain way over a revolving Carborundum wheel which is continuously bathed in water. The wheel is attached on a lathe, and the shape of the cutting surface of the wheel determines what shape the cut will be—round ones for flowers, rectangular ones for leaves, a sharp-pointed cutting surface for lines. These represent the three basic wheels of the glass engravers' armamentarium. Each can be modified to produce the desired design.

"The lathe, of a special build, has a very long shaft which projects over a water-catching box. It must run absolutely true. The faster the wheel goes, the smoother will be the surface, and vice versa. The smoother it is, the less contrast between the cut and the glass. All these factors are taken into consideration when a given design is to be made. Monograms in fancy glassware are done with the utmost precision, and it is a very interesting procedure to watch."

"The faster the wheel goes, the smoother will be the cut surface and, naturally, its tone will be a little darker than one made with a slowly revolving stone, which cut surfaces are much lighter, in fact almost white, and resemble the type of mark one would obtain merely by scratching glass. Therefore, these differences in tones are made use of in the composition of the design. In the case of a leaf, for instance, one can have highlights and shaded areas, thereby making the leaf look more real. The same principle is made use of when engraving an animal or a tree.

"There are two types of glass engraving, the overhand and the underhand. In overhand engraving one works through the glass to make the cut. With underhand engraving, however, one does it beneath the stone and must depend upon his sense of feel and direction. Naturally, this is a much harder type of engraving but necessarily must be done when such objects as small perfume bottles or salt shakers are dealt with.

Doctor Scorse puts his hobby to work especially at Christmas time, turning out many beautiful designs for gifts for his friends. He usually "takes to his basement," where he has his lathe and about 100 Carborundum wheels of various sizes and shapes.

Nor is our colleague without other talents—he follows two other hobbies which he claims to enjoy more than glass-engraving!

His pet hobby is woodworking, and his particular delight is making grandfather clocks out of solid walnut, using his own designs. To date he has made about eight, one of which is located in St. John's Hospital in Joplin, one in Our Lady of the Ozarks College in Carthage, one at the Menninger Foundation, and several others in the homes of his

(Continued on page 434)

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1. Heller, E. M.: The Treatment of Essential Hypertension. *Canad. Med. Assn. Jour.*, 61:293, Sept., 1949.

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Missouri Academy of General Practice

William G. Shaw, M.D.

In a spirit reminiscent of the first annual assembly in Cincinnati five years ago, the A.A.G.P. held the Sixth Annual Scientific Assembly in Cleveland, March 22-25 (registration 5,817), up 25 per cent over any previous registration. This included 2,853 physicians from the United States, Canada, Hawaii and England. Ninety-three delegates from a possible 102 answered roll call at the opening Congress of Delegates, including one from the recently chartered Hawaiian Academy of General Practice.

Dr. Howard Rusk, New York, a former Missouri practitioner, during an excellent presentation on "Rehabilitation," referred to the A.A.G.P. as one of the great powers of American medicine. Dr. Roscoe L. Pullen, Columbia, and Dr. Robert Myers, Kansas City, spoke to a large and appreciative audience on "Why Train for General Practice" and "Medical Complications in Obstetrics" respectively. Drs. Charles Martin, St. Louis, and Kenneth Glover, Mt. Vernon, adequately represented the Missouri Academy in all meetings of the Congress of Delegates. In addition, Martin acted as Press Committee chairman and Glover was a reference committee member on Constitution and By-laws. Dr. Charles Jost, St. Louis, chairman of this committee, addressed the delegates on several occasions.

Kansas City general practitioners seen were Drs. Joseph Getelson, president-elect of the Missouri Academy, P. J. O'Connell and H. L. Biggs. St. Louis Academy members registered included Drs. P. C. Hall, chairman of the Missouri Academy membership committee, B. T. Koon, Joseph Lederman, Charles O. Metz, N. L. Mistachkin, and C. O. Moldew. Outstate doctor members of the Academy attending were the ubiquitous Tom Dwyer, Mexico; David H. Glenn, Warsaw; Kathryn and Lawrence Epple, Mexico; W. E. Hendrickson, Poplar Bluff; E. B. Robichaux, Excelsior Springs; Clifton Smith, St. Joseph, and L. Y. Davis, Canton.

No better description of the flavor and tenor of the meetings could be given than that written by Dr. Howard Rusk in his regular feature in the *New York Times* for March 28, quoted elsewhere in this issue. (See "Others Say"—Ed.)

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Certain events happened last week that make me wonder if all this talk about doctors had ought to be active in community affairs ain't just a little bit wrong. It just about convinced me that people want me to look out after their sickness and keep myself available for such purposes. Course this maybe could be a strictly local affair except I know of several other instances where the same thing happened.

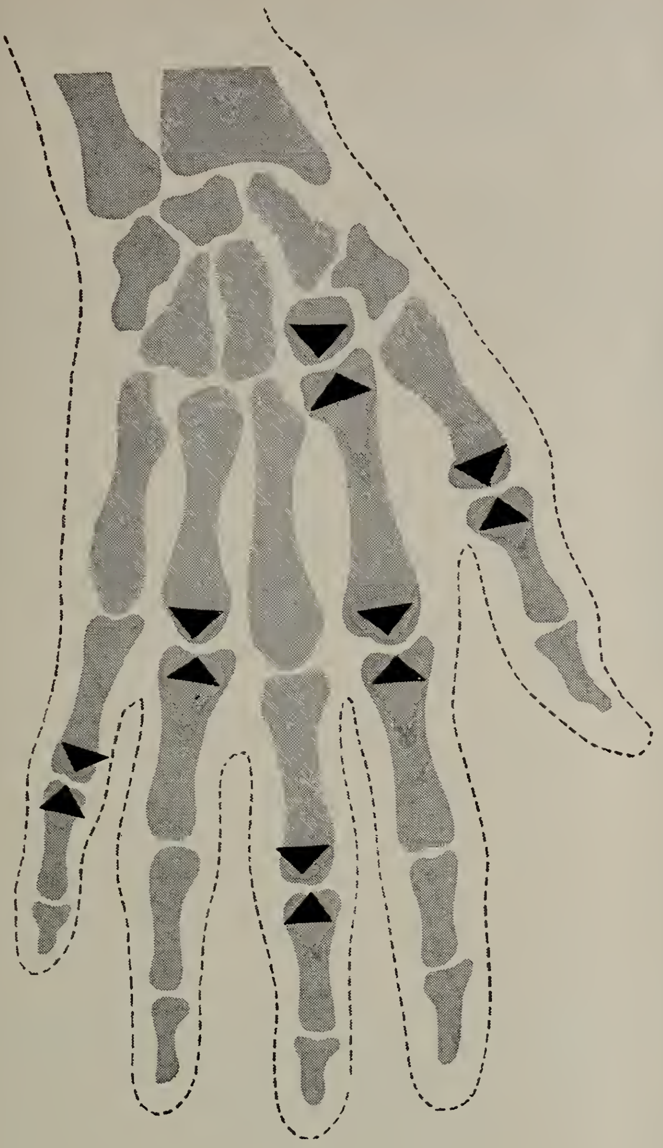
While back a couple of the local citizens asked me if I would serve on the school board. Remembering that our public relations experts say we should do such things I says sure I would be glad to. I was naive enough to think that was all there was to it. But I found out different. I got woomped but good the first time I tried for office.

Our school is like most of the reorganized districts. There are to put it mildly controversies. I noticed beforehand that practically all my patients avoided the subject except a few who remarked that they didn't see how the heck I would have time for it. As it turned out they all avoided my name on the ballot. Actually I am sort of relieved because the more I figgured it was just one more night tied up in a meeting.

After the election a couple came around and said they hoped I didn't get my feelings hurt, and that they knew why things went the way they did. First, they was all going to keep on having me for their family doctor but they just thought I had my hands full doing that. On this score I reckon they are right. A lot of them figgured maybe I would be too progressive in my thinking and want to get too much science and the like on the schedule. On this score they were way off base. If they only knew how I wished I had learned a little more about the arts, a good bit more about English composition, and how to spell when I was going to grade and high school.

So from now on I know my activities in community affairs will be strictly in an advisory capacity—if I am asked, and for diversion I will stick to my whitteling.

Your Nephew,
Pete.



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Missouri Medicine in Review

Leo H. Pollock, M.D.

JUNE, 1914

Dr. George Homan, St. Louis, writes that St. Luke, credited with the gospel bearing his name, and the Acts, was a physician well trained in Hippocratic medicine, which flourished for centuries before his time in Greece.

When Dr. Clarence M. Jackson became Professor and Head of the Department of Anatomy (U. of Minn.) last October, Missouri lost a distinguished scientist, a teacher in the U. of Mo. since 1897, and Dean of the Medical School 1909-1913.

The San Francisco celebration (to be in 1915), on completion of the Panama Canal, will honor Dr. William C. Gorgas, Colonel, U.S.A. Medical Corps, who preserved the lives of canal builders in a land of malignant disease, while the toilers worked under the guiding genius of Colonel George W. Goethals.

The first convocation of the American College of Surgeons, was held at the Gold Room, Congress Hotel, Chicago, November 13, 1913.

JUNE, 1929

Senate Bill 615 (Senator Hildreth, D.O., Macon) to amend the osteopathic law permitting Osteopathic physicians "to use narcotics in the practice of their profession." Last October, Federal Attorney-General Shartel decided an osteopath is not now so permitted.

Dr. Joseph Grindon's fifty years in medicine were honored by St. Louis Medical Society and the two medical schools, March 9. Professor of Dermatology in Washington U. for many years; in 1912 he became Professor of Dermatology in St. Louis U.

Dr. E. V. Cowdry, Professor of Cytology in Washington U., and Dr. S. F. Kitchen, have found that human livers from the last North American epidemic (New Orleans, 1902) had no discernible cytologic differences from the South American or West African types of yellow fever.

JUNE, 1944

Mr. Tom R. O'Brien, St. Louis, began his duties as Executive Secretary of the Missouri State Medical Association.

Dr. C. E. Burford, St. Louis, presided at the American Urological Association in St. Louis.

Dr. George Dock, Los Angeles, was awarded the Distinguished Service Medal by the House of Delegates of the A.M.A. Dr. Dock was Professor of Medicine at Washington U., 1910-1922, and was widely known for his work in pathology.

The 87th Annual Session of the M.S.M.A. was held in Kansas City, April 23. The officers are: President, A. W. McAlester, Jr., Kansas City; Vice-Presidents, Dudley A. Robnett, Columbia; Buford G. Hamilton, Kansas City; J. I. Byrne, St. Joseph; Treasurer, C. E. Hyndman, St. Louis; Secretary-Editor, R. L. Thompson, St. Louis.

What Is Your Hobby, Doctor?

(Continued from page 430)

friends. He obtains the works from London, and states a finished clock which would retail for from $600 to $800, can be made for about $125.

"The hobby of building grandfather clocks probably stems from the time when I first came to this country from England. I got a job with the Herschede Hall Clock Company in Cincinnati and worked for them for about one year. My job was to make the corner and center pieces for the face. These pieces are cut out of brass sheeting with elaborate designs. This was done with a jig saw. Of incidental interest is that in the Student Union Hall of the University of Kansas at Lawrence is a Herschede hall clock with some of my work on it. One can recognize his own work in this direction just as easily as one can recognize one's own handwriting."

"The other hobby is watercolor painting, which came into its full bloom during the war years when I was stationed in India. Had it not been for this hobby, in the spare time we all had to burn, I would have gone stark raving mad. I sketched every place I visited in India, and these sketches now adorn our home. Watercolor painting is actually harder than oil painting because you can't go over your mistakes." Doctor Scorse has had several pieces on exhibit in the American Physicians Artists Association.

(We will all agree this man Scorse does marvelous work with three unusual and skilled hobbies; he is to be congratulated. Let us hear of other hobbyists throughout the State, please! V. T. W.)

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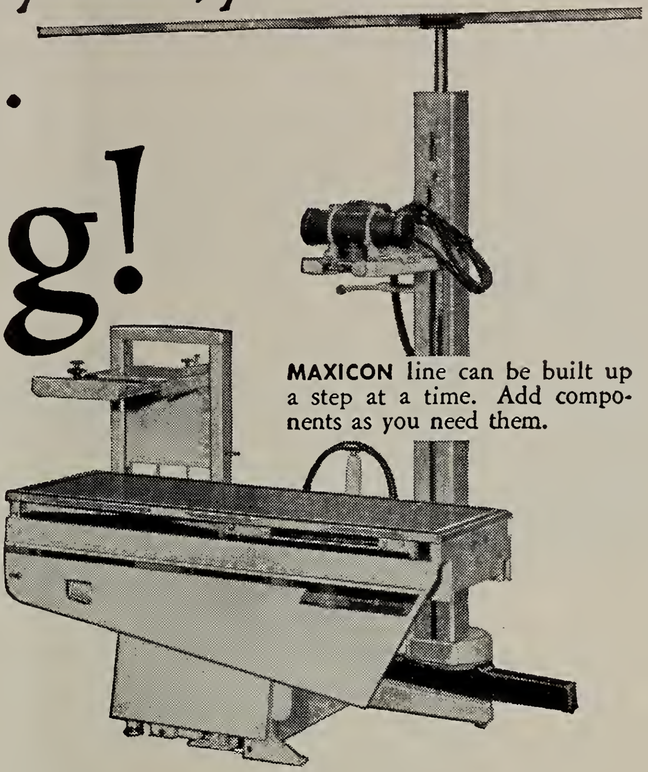

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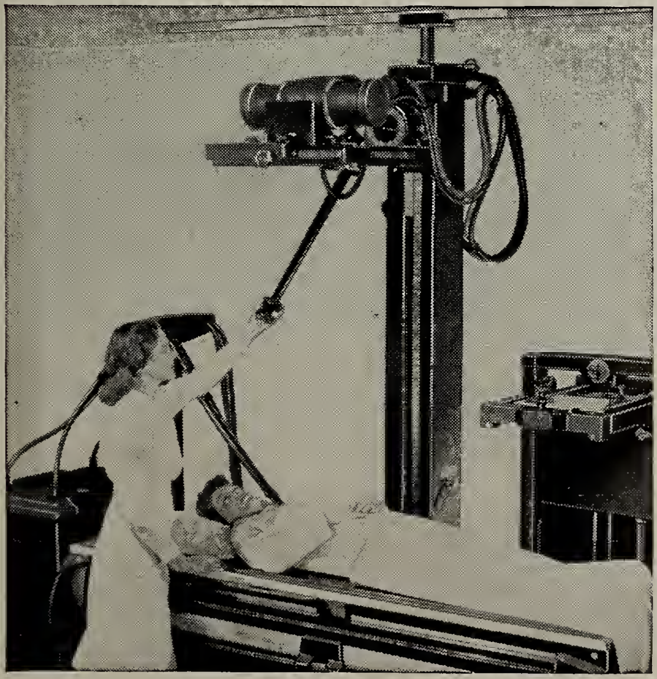

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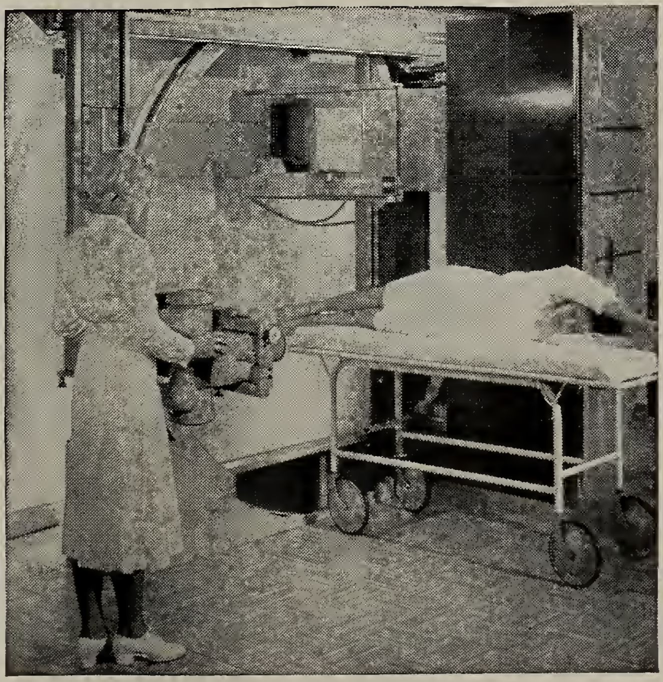

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With Our Auxiliary

Mrs. W. E. Martin, *President*

Our Medical Student Loan Fund now has granted seven loans to five medical students, totaling a sum of $5,200.00. At the meeting in St. Louis enough money was taken from the general fund to make a second loan possible to a medical student at Washington University this year, making the total amount on loans by September, 1954, $6,800.00.

This is a brief history of the loan fund. In 1929-1930 the Auxilary gave $1,000.00 toward the education of a Missouri University medical student. This was proposed by Mrs. M. P. Ravenel of Columbia. The money was prorated according to membership. The student chosen for the gift was Edwin Schmidtke, who in appreciation for the gift gave $1,000.00 to the Auxiliary in 1945. This became the nucleus for establishing a loan fund of $600.00, then later $800.00 a year to be known as the Medical Student Loan Fund. Provision was made in the By-laws of the Auxiliary for 50 cents of the state dues of each member to be put in a loan fund, making an income of $800.00 plus per year. During the national G.I. loans there was no call for our loan, and the money accumulated in a savings account. Since 1951 two loans have been granted each year, until now the total amount is on loan.

The applicant must be a resident of Missouri, who is enrolled as a medical student either the third or fourth year, in an accredited medical school. They must offer an acceptable scholastic rating and high moral character. The money is loaned at a yearly interest rate of 2 per cent, the notes become payable or interest bearing three years after graduation. The fund is administered by a committee of five, three of whom are elected for a three year term, by the Executive Board of the Auxilary, two members are appointed by the president of the M.S.M.A. Mrs. H. L. Mantz, Kansas City, is chairman of the Medical Student Loan Fund this year.

Letters of appreciation were read at the Annual Meeting from two students, now M.D.s.

This is a benevolent project of which the Auxiliary is justly proud—that is, helping educate future M.D.s.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

An OB patient of mine was nearing term and I asked her how she felt. "Doctor," she replied, "it's like building a boat in the basement. As it progresses you wonder how you are going to get it out."

Old Doc Holtzen always noted on his histories those patients whose feet showed a lack of use of soap and water—as having a peculiar earthly pigmentation of the skin.

I've always been amused by the story of the English professor who told his class that the next hour would be used to write a short story containing religion, sex, royalty and mystery.

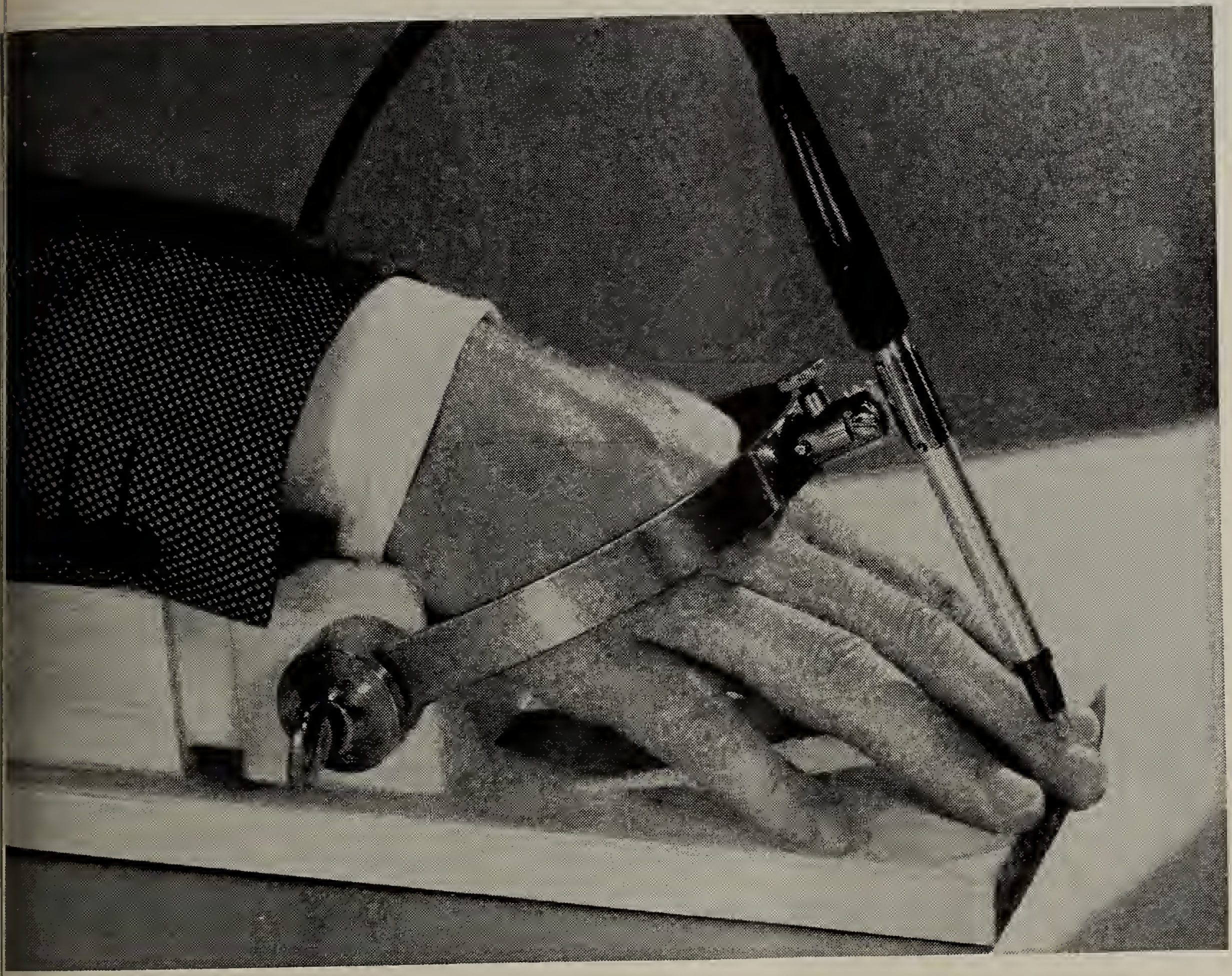
Within a few minutes a pre-med student has his ready. It read—"My God!" exclaimed the King. "The princess is pregnant. Who done it?"

A patient just was in my office and wanted some medicine for tape worms. She stated she had two of them. I asked her how she knew, and she said she could feel them biting her.

I heard about a husband and wife who consulted a psychiatrist. "We've been married more than twenty years," explained the husband, "And lately she's been acting queer." "In what way?" asked the doctor. "She keeps goats in the living room. They smell terrible." "Why don't you open the doors and windows?" suggested the psychiatrist. "What? and let all my pigeons fly away."

You can get a lot of laughs out of life if you listen and don't get mad.

Physiological test compares Kent's "Micronite" Filter with other cigarette filters



To compare the efficiency of various filters as they affect physiological responses in the cigarette smoker, drop in surface skin temperature at the last phalanx was measured.

Using well-established procedures, the subject smoked conventional filter cigarettes and the new KENT with the exclusive "Micronite" Filter.

For every other filter cigarette, the drop in temperature averaged over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

These findings confirm the results of other scientific measurements that show these facts: ordinary cotton, cellulose or crepe paper filters remove a small but ineffective amount of nicotine and tars; KENT's Micronite Filter *approaches 7 times the efficiency of other filters in the removal of nicotine and tars* and is virtually twice as effective as the next most efficient cigarette filter.

Thus KENT, with the first filter that really works, gives the one smoker out of every three who is susceptible to nicotine and tars the protection he needs . . . while offering the satisfaction he expects of fine tobacco.

For these reasons, smokers have made the new KENT the most popular new brand of cigarette to be introduced in the last 20 years.

If you have yet to try the new KENT, may we suggest you do so soon?

Takes out up to 7 times more nicotine and tars than other filter cigarettes

TWENTY
KENT
CIGARETTES
WITH THE MICRONITE FILTER
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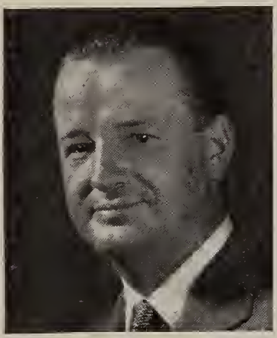
Guest Editorial

Benson Ford, *President Board of Trustees, Henry Ford Hospital*


Benson Ford

From the medical advances of recent years, it is obvious that today's doctor is keyed to progressive medical thinking in solving the ills which might befall any of us. In fact, today's doctor gears his life to this exacting end. Then, when I am asked what I would advise for the further progress of medicine today, I can and would only draw from my own experience in the business world and from what I have observed as a hospital trustee.

Perhaps it is in the doctor's complete absorption with his medical problems that might give us the opportunity. This would be in the application of the business principles of maximum efficiency, effective utilization of personnel and in the establishing of good medical economics.

We know that the large medical centers can provide excellent medical care for great numbers of people at a reasonable cost. Such centers can include the necessary technical assistance which greatly aids in accurate diagnosis and treatment. It would seem, then, that smaller communities could incorporate this idea of correlating technical facilities and doctor's offices into medical units to provide more complete medical service, effective and efficient utilization of personnel and also reduce the costs to both the doctor and the patient. This grouping of offices, technical services and personnel need not constitute a business arrangement among the doctors but rather would be a sharing of common ground.

Could precise business principles applied to the medical field further implement the management of hospitals and clinics? The administrator specially trained in these principles could effect a sound economic policy, develop the efficiency of the clerical as well as the medical assistants, and perfect the operational methods of the organization. Promotion of these administrative principles might increase the professional effectiveness of the doctor.

The furthering of voluntary insurance programs, both the Blue Cross, Blue Shield and other plans is needed to augment health security. Doubtless the problems existing in health insurance will require the doctor to adhere strictly to the limits of each insurance policy. On the other hand, the insurance plans may need to be altered to provide more flexibility and more complete coverage. Perhaps incorporating the deductible clause from automotive insurances might give the needed flexibility and additional coverage to medical insurance. It would allow the plan to keep a sound financial structure yet permit the subscriber to buy the amount of the service he wants and can afford.

Progress Notes of Prepayment Plans

(St. Louis Blue Shield)

St. Louis Blue Shield (Missouri Medical Service) paid benefits on 64,573 cases during the six months period from September, 1953, through February, 1954, according to a study recently completed.

The study demonstrates the extent to which Blue Shield benefits are being made available over the fields of surgery, medicine, obstetrics and the specialty services such as x-ray, anesthesia and pathology.

Services	*Number of Cases*	*Percentage*
All surgery other than obstetrical	16,388	25
Obstetrical	3,820	6
Medical	10,140	16
X-ray	10,230	16
Anesthesia	10,762	17
Pathology	13,233	20
TOTAL	64,573	100

"The more than 64,000 cases were diversified over the six classes of service," Carl F. Vohs, M.D., president of St. Louis Blue Shield, points out. "Our goal in establishing benefits is to fit them to the services provided by our participating physicians within the limits required to keep our dues in reach of the average family's pocketbook. The benefits are set in consultation with representatives of the various fields of medical service.

"Since Blue Shield was established nine years ago, we have been in a more or less constant process of revising our schedule of benefits. We will continue to make changes as the plan continues to grow."

"...when the patient is in acute distress from waterlogging..."

"Meralluride sodium solution (MERCUHYDRIN) in 1 to 2 cc. doses intramuscularly has been very effective and is not painful."* In acute congestive failure, MERCUHYDRIN characteristically curbs tissue inundation and relieves dyspnea, orthopnea and cardiac asthma.

Ampuls of 1 cc., 2 cc., and 10 cc. vials.

*Stead, E. A., Jr., in Cecil, R. L., and Loeb, R. F.: Textbook of Medicine, ed. 8, Philadelphia, W. B. Saunders Co., 1951, p. 1065.

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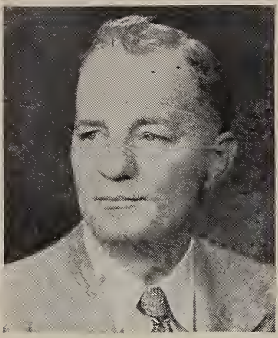
President's Comments



As I stated before the House of Delegates at the Annual Meeting in St. Louis, one of the biggest problems facing all doctors of Missouri is that of a single licensure act for the State of Missouri and the elimination of separate examining boards.

What is the possible justification—at this time in the history of medical knowledge and of science—for allowing practitioners, without even minimum qualifications, to set themselves up as Doctors?

There can be no justification for having several sets of standards, several licensing bodies, several levels of competence among those who are to care for the sick.

The people of Missouri have a right to expect the state to see to it that only qualified persons may be admitted to the healing arts. They have a right to expect that anyone who sets himself up to be a Doctor in this state must be competent to diagnose and treat (or refer for treatment) persons with illness which come before him.

Harold E. Petersen, M.D.

Others Say

In an Unenviable Spot

. . . costs of operation have skyrocketed until there is a feeling even among some stanch adherents of independent funding that federal subsidy may be unavoidable. It will not be unavoidable if sufficient concern for medical education is fostered among business and industrial leaders, among the wealthy of the land who have an interest in scientific advancement. Dr. Louis H. Bauer . . . is right, and the A.M.A. is right, in opposing government support of schools. Federal fingers on the purse strings almost infallibly portend federal control. . . . Expenses of getting a medical education have mounted to amazingly steep figures. Unless some remedy is available soon, only the rich can study medicine.—Editorial, *St. Louis Globe-Democrat.*

Bilaterally Beneficial

. . . Establishing one examination for one standard license would neither add to nor detract from the osteopathic practice as it is conducted today. In the long run it should encourage the osteopathic profession in its efforts for steadily raising the standards of its schools and its practitioners. Instead of a constant battle it should gradually bring about a closer relation between doctors of medicine and doctors of osteopathy.

We believe the state medical association took a realistic and progressive step which should lead to action by the Legislature.—Editorial, the *Kansas City Star.*

United We Stand, but . . .

A recent survey of the staff of Medical Economics reveals that one-third of the 214,000 eligible physicians in the U. S. do not belong to the A.M.A. A further survey of one thousand nonmembers from all parts of the country revealed that about 50 per cent were semi-retired, in military service or were just getting started in practice. An additional 10 per cent had been refused admission to county societies for one reason or another. The remaining 40 per cent could belong but insist they had rather not because of high dues, or disagreement with certain policies of the A.M.A.

It seems that the time has arrived for medicine to present a united front. Surely organized medicine can do a better selling job on the advantages of membership and by finding a way to admit those doctors who, though qualified, have been rejected by their county societies.—Ed Campbell, M.D., "The President Says," *Cape Girardeau County Journal.*

Minute Editorial

"Just a minute . . ." we say every day. We should never belittle the minute and that which it contains. The whole course of one's life may be changed by decisions or situations within the space of sixty seconds.

Yet it is possible to consciously select a minute out of each day composed of 1,440 such artificial divisions of time and so fill this minute with content that it can illumine the whole day.

One minute a day is more than enough for a good deed or two. Time to speak a pleasant word, to spread a cheerful greeting, or give a word of praise. Sometimes a minute can bring a decisive effect on changing a person's life, both the giver's and the recipient's. Just a minute a day could add up almost to saintliness.

You can exceed these random thoughts in quality and depth—if you will just take a minute.—Editorial, *Pettis County Medical Bulletin.*

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 June, 1954 Number 6

Cancer of the Prostate

Results With Conservative Management

C. E. BURFORD, M.D., AND E. H. BURFORD, M.D., *St. Louis*

Carcinoma of the prostate gland prior to 1941 was the greatest dread of the male from middle age on. Some authorities had reported lengthy survivals exceeding five years by any one of several methods of management, but the majority died a most unhappy and painful death. In 1941 the discovery of the neutralizing effect of estrogen by Huggins and Hodges offered great hope for these sufferers. Reports appeared admitting decrease in symptoms of carcinoma and gradual increase in longevity of patients. The purpose of this paper is to report the clinical findings and the results of cases with carcinoma of the prostate treated palliatively.

AGE INCIDENCE

Of the entire series of 480 cases of carcinoma of the prostate there were forty-seven cases in which no age was established. Of the remaining 433 the average age on diagnosis was 69 years. A total of 70 per cent of all cases were diagnosed between the ages of 60 and 80 years. The youngest case was 40 and the oldest 96, the latter being followed for three additional years. Those cases with proven pathology after 1941 numbered 150. Of this group eighty-five cases or 57 per cent were 70 years or older. Forty-four were 75, and eighteen were 80 years or older.

SYMPTOMATOLOGY

When symptoms were stated, a total of 413 presenting complaints were found. These were as follows: nocturia 104, acute urinary retention sixty-seven, weight loss fifty-nine, sciatica fifty-two, slow stream twenty-nine, frequency twenty-five, back pain or ache twenty-four, hematuria nineteen. dysuria eleven, urgency seven, anemic or weak six, residual urine four, no symptoms three, inguinal lymphadenopathy two, repeated vesical calculi one. Approximately 37 per cent of the presenting symptoms in the entire series were those of rather advanced carcinoma of the prostate. The average patient waited nine months after the appearance of the first symptom before consulting a urologist.

RECTAL PALPATION

The various descriptions of the abnormal palpations obtained were nodular, irregular, hard, firm, fixed, large and small, lump, extension upwards. Where unilateral pathology existed, the right side was involved seventy-eight times and the left eighty-four. There were twenty-four cases in which the prostates were soft or negative to palpation. Of these twenty-four soft prostates, eighteen had positive sections, three had bony metastases, two had positive biopsy of inguinal lymphadenopathy and, in one case, the prostatic carcinoma had broken through into the urinary bladder.

Reynolds, Schulte and Hammer state that 88 per cent of rectal palpations were positive. In those cases with proven pathology after 1941, rectal palpation was positive in 84 per cent. In the entire series of 480 cases, rectal palpation was positive in 95 per cent of the cases.

METASTASES

Of the entire series of 480 cases, demonstrable metastases occurred in forty-three cases or 9 per cent. The various sites involved were as follows: bony site not designated eleven, lumbar vertebra seven, spine and pelvis six, pelvis four, ilium two, lymphadenopathy groin two, ribs-pelvis-spine two, clavicle two, bladder two, pelvis-femur-vertebra one, pelvis-femur-rib one, skull-pelvis-spine one, bowel one, ribs one.

In those cases with proven pathology after 1941, thirty-seven of 150 or 25 per cent showed metastases when first examined. This figure agrees ex-

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From the Department of Urology, St. Louis University School of Medicine, St. Louis.

actly with that given by Thomas. In this group of thirty-seven cases, there were nine surviving five years with twelve dead of disease, for a five year survival rate of 43 per cent. Among the survivors are one case twelve years, two cases eleven years, one case eight years, three cases seven years, one case six years and one case five years. This would be a 19 per cent survival rate for ten years with positive metastases when first examined.

SURVIVAL

The operative mortality applied to any case not surviving six weeks. The operative mortality for the entire series of 480 cases was 2.5 per cent. The survival and operative mortality for pre-estrogen and post-estrogen periods are as follows:

	Number Cases	*5 year Survival*	*10 Year Survival*	*Operative Mortality*
Cases Prior to 1941 without Positive Pathology	82	13%	7%	5%
Cases Prior to 1941 with Positive Pathology	73	32%	4%	4%
Cases after 1941 without Positive Pathology	175	71%	24%	1%
Cases after 1941 with Positive Pathology	150	60%	19%	2%

The latter group had 25 per cent demonstrable metastases when first examined and 57 per cent were 70 years or older.

SURVIVAL AND METHOD OF MANAGEMENT

In those cases with proven pathology after 1941 the following surgical procedures were employed together with the use of estrogen:

Surgical Procedure	*Number Cases*	*5 Year Survival*	*10 Year Survival*
*T.U.R.	92	52%	0%
Testicular Evisceration & T.U.R.	18	39%	8%
Testicular Evisceration	8	33%	33%
Prostatectomy, radium in catheter	4	100%	100%
T.U.R., Eviscerat., radium in catheter	2	50%	0%
T.U.R., Deep X-ray	1	100%	100%
Prostatect., radium cath., eviscerat.	1	100%	100%
Estrogen only	24	50%	22%

* Transurethral prostatic resection

Good results were obtained by treatment in which too few cases appeared, i.e., prostatectomy in conjunction with radium element per urethral catheter, transurethral resection with deep x-ray therapy and prostatectomy with radium in catheter followed by testicular evisceration. Yet these six cases did not survive ten and twelve years by chance. With stilbestrol alone there was a 50 per cent five year survival but only a 22 per cent ten year survival; yet with testicular evisceration combined with stilbestrol there was a ten year survival rate of 33 per cent.

DISCUSSION

The general public as well as the profession are now better informed and more alert to cancer than they have been in the past, as evidenced by the improvement in the results obtained. There is still much to be desired, however, in earlier diagnosis and preventive medicine in annual rectal examination in all men 40 years and older, regardless of symptoms.

Our feeling at present regarding orchiectomy is similar to that of Parlow who advocates withholding it for advanced cases with metastases and marked symptoms or cases which soon seem to fail to respond adequately to other methods of treatment.

In spite of any type or combination of therapy for carcinoma of the prostate gland, it is conceded by all who treat it that there is a definite small percentage that rapidly go downhill and die. Nevertheless, as Rusche says, the comfort which these patients enjoyed during their terminal years makes estrogen an opiate for decreasing the dread of death, the pain, and prolonging life.

A study by Barnes points out the merit of palliative treatment of carcinoma of the prostate by his five and ten year survival of substantiated cases of early carcinoma. It compares most favorably with others who have offered radical extirpation to their patients.

At a glance one may see from this survey that the results of conservative management compare more than favorably with other methods of treatment to date. This especially is true with such an overwhelming proportion of cases which, when first diagnosed, have already reached their life's expectancy and some are riddled by metastases. This report contains an adequate number of cases to be significant. It is true that in a few carefully selected cases, when seen early before carcinoma has spread beyond the capsule of the prostate and when the patient has more than a five to ten year life expectancy, a radical procedure is worth the risk.

Certainly the symptoms play a part together with the physical examination in all cases. To say that this condition is asymptomatic and surround it with an aura of mystery and dread is compounding a felony. There are a few cases about which there may be some question and these had best be seen by one with experience.

The delay in consulting a surgeon competent to judge this situation is noteworthy through the years and regarding all carcinomata. All experienced surgeons bemoan the fact that had they seen that particular case earlier—even six months earlier in many cases—his or her life might have been saved or at least given a chance of survival.

The simple expedient of rectal palpation by a practiced finger may make the difference of life or death. Yet from this series one sees that it is never too late, with modern medicine, to hope. Even those cases with advanced metastases have responded almost as well as those without.

The exact procedure required to prolong the patient's life afflicted with carcinoma of the prostate depends on the condition of the patient, how long he has had symptoms, the experience of the surgeon consulted and his willingness to cooperate in the program outlined for him.

CONCLUSIONS

1. Endocrine therapy has completely changed the treatment of carcinoma of the prostate gland.
2. Patients with carcinoma of the prostate, regardless of the delay in diagnosis, can be relieved of symptoms with greater safety.
3. Routine rectal examinations at least annually of all men 40 years or older offers the best chance for early diagnosis and prolonged survival.
4. Even in advanced cases of carcinoma of the prostate, a 60 per cent five year survival rate may be anticipated.
5. From this survey, the best method of management of carcinoma of the prostate is testicular evisceration combined with estrogen in offering a 33 per cent ten year survival.

958 Arcade Bldg.

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A New Concept

. . . We have been impressed by the general failure to obtain even fairly good results on patients with chronic pancreatitis with advanced pathologic changes in the pancreas. In these patients with severe alteration of the normal architecture of the gland, pancreatic insufficiency has been a constant accompanying factor. This has led us to recommend partial pancreatectomy in these advanced cases, and in our hands this has been rewarding.

. . . After partial removal of . . . a *burned-out* pancreas we have been impressed with the return to normal of diastase values, decrease in steatorrhea, and the ease of control of diabetes. We wish to stress that *total* pancreatectomy does not seem warranted as a primary procedure and that *partial* pancreatectomy is advised only in certain patients with severe pancreatic pathology and evidence of pancreatic insufficiency.—Gene B. Starkloff, M.D., Wm. A. Knight, Jr., M.D., and Robert Pollock, M.D., St. Louis, *The American Surgeon.*

Another Hiatus

. . . What is shocking . . . is to realize that patients with cancer of the breast are still being subjected to an inadequate operation which can only shorten their maximum span of life and thus needlessly increase cancer mortality. In the strenuous drive against cancer, this aspect of therapy must be emphasized more widely, especially since the breast ranks so high as a frequent site of cancer. It seems wasteful and myopic to expend so much effort on programs to detect cancer early without at the same time taking measures to insure its adequate removal. An important part of the responsibility of the Tissue Committees . . . should be the assay of adequate surgery as well as of unnecessary surgery. Even if time-consuming techniques of examining specimens are required to make such studies, the potential rewards to the patient are so great as to make the effort worth while.—Robert Elman, M.D., St. Louis, Editorial, *Archives of Surgery.*

"Lockjaw Shots"

. . . Tetanus is a preventable or almost preventable disease. The essentials of prophylaxis include adequate wound debridement, open wound drainage in doubtful instances and active or passive immunization. The importance of thorough debridement and the omission of wound suture cannot be overlooked. Even so, serologic protection is essential.

The keystone of protection is active immunization with tetanus toxoid. When the routine of active immunization . . . is followed, tetanus will rarely occur. In the unimmunized at our present state of knowledge, passive immunization must be used. It must be clearly understood, however, that tetanus can and does occur in spite of prophylactic tetanus antitoxin . . . in the usual dosage of 1,500 units (it) should not be expected to protect for longer than seven days.

. . . Tetanus antitoxin should not be administered until tests for sensitivity have been made. These should not be performed with the full strength serum. Rather it should be diluted 1 to 10 and a skin test performed. A positive skin test indicates the ophthalmic test. If both are positive, the danger of anaphylaxis is great . . . investigation appears to have definitely established that the booster dose of toxoid will recall to protective levels an active immunity established four or five years previously.—Oscar P. Hampton, Jr., M.D., St. Louis, *American Journal of Surgery.*

Spontaneous Internal Biliary Fistulae

ROBERT W. KELLEY, M.D., *St. Louis*

IN BENIGN GALLBLADDER disease, symptoms usually develop as a result of inflammatory changes in the gallbladder or because of the extrusion of stones which partially or completely block the excretory ducts. On occasion, fistulous communications will develop between the gallbladder and surrounding organs or between the gallbladder and the external surface of the body. Such fistulous communications may be silent or produce a wide variety of symptoms. Biliary fistulae, although a relatively uncommon complication of cholecystic disease, occur with sufficient frequency to require consideration of their possible presence and a knowledge of the remote efforts they can produce.

The incidence of biliary fistulae has decreased since the advent of gallbladder surgery. The abandonment of cholecystotomy as a routine operation has further reduced the number of possible fistulae. Gallbladder disease is treated earlier in its course and the number of symptomatically active but untreated cases is small. The literature of the presurgical era is full of references to bizarre fistulous communications between the gallbladder and the surface of the body. In Naunyn's[1] series of 384 spontaneous fistulae seen prior to 1896, 184 were of the external type. These usually arose as a result of pericholecystitis, followed by localized abscess formation and erosion through the anterior abdominal wall. Internal fistulae will continue to be seen since they may develop with considerable subtleness and actually represent the clinical introduction to the presence of gallbladder disease.

Internal biliary fistulae communicate in all but the rarest of instances with the gastrointestinal tract. Isolated cases of communication with urinary bladder, uterus, vagina, kidney pelvis, portal vein and hepatic artery have been reported. Bronchobiliary fistulae develop secondary to cholangitis, liver abscess and diaphragmatic penetration. The cases available for this presentation involve communications between the gallbladder and the gastrointestinal tract and this discussion is limited to this particular phase of the problem.

Various authors[2] with large series have found internal biliary fistulae in from 1 to 5 per cent of the operations for nonmalignant biliary disease. Five of the cases included in this report were seen at one hospital during a three year period, during which time there were 282 operations for benign biliary disease.

Internal biliary fistulae develop secondary to cholecystitis and cholelithiasis. In rare instances fistulae appear in the absence of stones and secondary to duodenal ulcer, or malignant disease of biliary tract, stomach or pancreas. The biliary terminal of the fistula is most often in the fundus of the gallbladder, with occasional terminations in the cystic or common duct. Reconstruction of the development of fistulae, as revealed by evidence obtained at operation or autopsy, usually indicates prior attack of acute inflammation of the gallbladder wall with serosal irritation and adhesion to surrounding structures. There may be a localized perforation, as well as pericholecystitis, with the development of a pericholecystic abscess. The gallbladder wall loses its elasticity, becomes thickened and does not adapt itself to the contained calculi, which then act as irritating foreign bodies promoting the development of fistulous tracts. It is possible that small fistulae may heal and thus terminate the fistulous phase of the disease. Fistulae which remain open are symptomatic because of the abnormal entrance they allow to the biliary tree of infective or chemically active material, or because of the release of stones which produce varying degrees of intestinal obstruction, dependent on the greatest diameter of the stones. Biliary fistulae opening into the colon and continuous with the hepatic tree will release irritating bile into the colon, producing a persistent diarrhea. Large fistulous openings may lead to extensive scarring with local stricture formation. This is a more likely complication when the duodenum is involved due to its fixed position and small lumen. Fistulae which allow regurgitation through the cystic duct and thence into the hepatic tree are complicated by a cholangitis which is usually recurrent and which in time may produce widespread intrahepatic scarring or actual abscess formation. Cholecystocolic fistulae subject the biliary system to a higher degree of bacterial contamination than would come from the stomach or upper small intestine.

Internal fistulae may be associated with common duct obstruction. In such instances the development of the fistulae relieves the obstructive jaundice but recurrent cholangitis will point to the possible presence of an abnormal communication between intestine and biliary tract.

Fistulae are most common in the sixth and seventh decades of life and, corresponding to the sex incidence of gallbladder disease, are most frequent in females. The following cases are used to illustrate several of the clinical pictures which may be encountered.

REPORT OF CASES

Case 1. R. A. L., a 57 year old, white, married,

From the Department of Medicine of Washington University and the Gastrointestinal Service of the Missouri Pacific Hospital, St. Louis.

Presented before the St. Louis Internist Club, September 24, 1953.

housewife, was admitted to the Missouri Pacific Hospital on July 6, 1953, with complaints of nervousness and excitability. She denied any serious illness in the past or any major episodes of indigestion. The physical examination and routine laboratory procedures revealed no gross abnormalities. Gastrointestinal x-rays demonstrated a cholecystoduodenal fistula without regurgitation into the common duct or the hepatic tree. The gallbladder was moderately retentive of barium to twenty-four hours. An oral cholecystogram failed to visualize the gallbladder. The patient was treated for her nervous disorder and discharged on continuing medical observation.

In this instance, a history of acute gallbladder disease could not be obtained. The patient's symptoms did not suggest the presence of the fistula which was a casual finding during a routine screening procedure. It is postulated that the residual gallbladder exists as a diverticulum of the duodenum and that the cystic duct is blocked, preventing access of duodenal contents to the biliary tree.

Case 2. H. M. W. At 35, this white, married housewife had an acute attack of cholecystitis. She recovered and was largely asymptomatic until the age of 48. A three weeks illness, characterized by epigastric discomfort, bloating and nausea, prompted admission to the Missouri Pacific Hospital on February 1, 1953. The physical examination was normal aside from slight upper abdominal tenderness. Gastrointestinal x-rays demonstrated a cholecystoduodenal fistula with multiple large nonopaque areas within the gallbladder (fig. 1). The cystic dust was shown to have a markedly narrowed, cork-screw channel. The gallbladder could not be visualized by oral cholecystography. At laparotomy (Dr. B. Passanante) on February 6, 1953, the gallbladder, filled with five or six large faceted stones, was separated from the duodenum and removed. The fistula entered the duodenum just distal to the pylorus. Recovery was uneventful.

Findings at operation in this case indicated that the fistula had been present for many years and that the recent digestive upset had not been associated with any marked inflammatory changes. In this patient it is probable that the fistula developed some thirteen years prior to operation and that the lesion was silent during this long interval in spite of the fact that all the stones had not been discharged from the gallbladder. The cystic duct was practically obliterated, probably accounting for the absence of clinical cholangitis or evidence of hepatic damage.

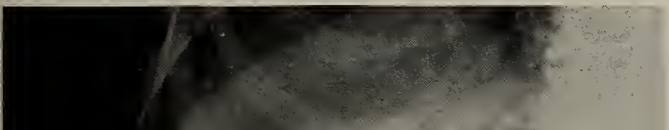

Fig. 1. Case H. M. W. Duodenocholecystic fistula. Note the "cork-screw" narrowed cystic duct, the partially filled common duct and the retained nonopaque stones in the contracted gallbladder.

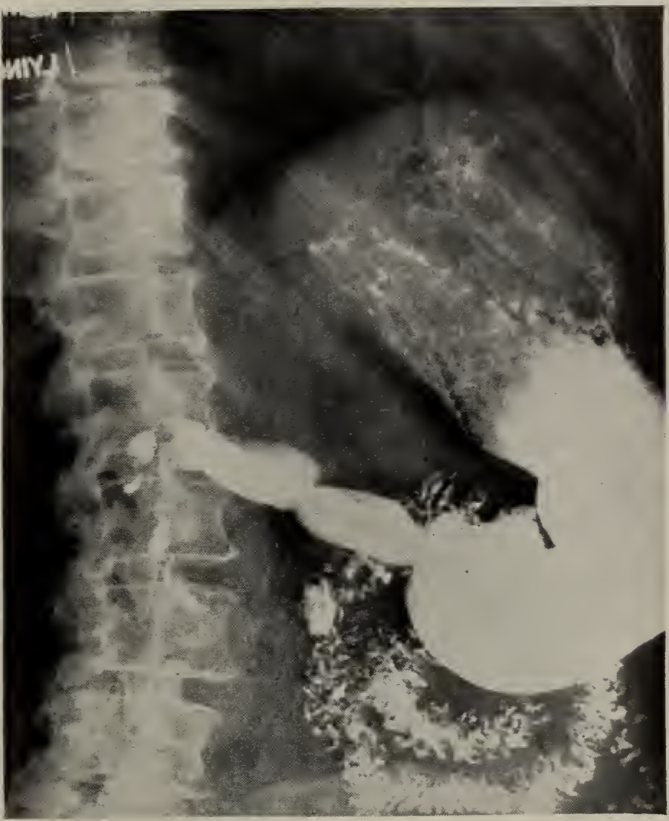

Fig. 2. Case N. M. B. Duodenocholecystic fistula. The dense spherical lead shot can be seen in the greatly stenosed gallbladder. There is no regurgitation through the cystic duct into the hepatic tree.

Case 3. L. C. This white, married housewife, suffered initial gallbladder symptoms at age 62. She was admitted at age 65 to the Missouri Pacific Hospital on January 2, 1952, because of persistent watery diarrhea present for the previous six weeks. The patient was mildly icteric, but afebrile and had minimal abdominal tenderness. Gastrointestinal x-ray studies showed the cholecystoduodenal fistula and the gallbladder could not be visualized by oral cholecystography. On January 18, 1953, laparotomy (Drs. E. Sheridan and R. Weir) revealed a small thick walled gallbladder adherent to the first portion of the duodenum. The gallbladder was removed and the fistulous opening into the duodenum closed. The common duct was opened but contained no stones. Recovery was uneventful and the presenting symptom of diarrhea cleared.

The diarrhea in this case may have been a result of the fistulous communication between gallbladder and duodenum. On the other hand, it may have been an unassociated fortuitous symptom leading to the diagnosis. It is probable that the fistula actually developed some three years prior to operation. A mild cholangitis was present in this case.

Case 4. N. M. B. At age 66, this white, widowed female had her first attack of cholecystitis. A diagnosis of gall stones was made. At age 73 she began having episodes of chills and fever, occurring every ten days and treated as "malaria." On August 8, 1951, the patient was admitted to the Missouri Pacific Hospital. An oral cholecystogram failed to visualize the gallbladder. A single lead shot appeared in the gallbladder area. Gastrointestinal x-ray studies demonstrated a cholecystoduodenal fistula and fixed the lead shot in the gallbladder (fig. 2). At laparotomy (Dr. R. Weir) on August 25, 1951, the fistulous communication between the duodenum and a small scarred gallbladder was severed, the gallbladder removed and several common duct stones evacuated. The previously described lead shot was found in the gallbladder. Recovery was uneventful. Cholangiogram on September 5, 1951, through T-tube demonstrated a patent common duct free of stones.

In this instance, onset of clinical gallbladder disease occurred at age 66 and the recurrent cholangitis appeared seven years later, receiving treatment as malaria until discovery of the fistula. The presence of a patent cystic duct plus partial or intermittent common duct obstruction, set the stage for the recurrent hepatic fevers. It is interesting to speculate why the lead shot which had been ingested should take the difficult route through the fistula rather than the more direct and easier intestinal passage.

Case 5. L. Y. This white, married housewife was 67 years of age at the time the fistula developed. At age 60, she had resection of the sigmoid colon for carcinoma. At age 61 she reported widely separated episodes of mild upper abdominal discomfort and at age 66 had her first attack of severe mid-upper abdominal pain. Gastrointestinal series was negative but no concentration of dye could be obtained on oral cholecystography. A large, faintly laminated stone was visualized in the gallbladder area. Six months later, on May 19, 1951, she developed severe mid-abdominal pain which soon became cramping in character, and was accompanied by a loose watery diarrhea. The patient took paregoric without relief and then magnesium citrate. Her cramping increased in severity and she was hospitalized on May 20, 1951. There was no abdominal rigidity or localizing tenderness to pressure. There was, however, a remarkably exquisite rebound tenderness in the right lower quadrant at about McBurney's point. Open film of the abdomen (fig. 3) demonstrated early small intestinal dilatation. On laparotomy (Dr. H. Haffner) a small thick walled gallbladder which was densely adherent to surrounding structures was found. In the mid-ileum there was a large gall stone which had lodged tightly in the lumen and had produced considerable edema and inflammation of the ileal wall. Serosal irritation was evident. The gallstone was removed and the ileum closed. Upper gastrointestinal studies on June 1, 1951, demonstrated the cholecystoduodenal fistula. The patient elected to defer cholecystectomy and excision of the fistula. Subsequent examinations have demonstrated persistence of the fistula. There has been one short episode of cholangitis to date.

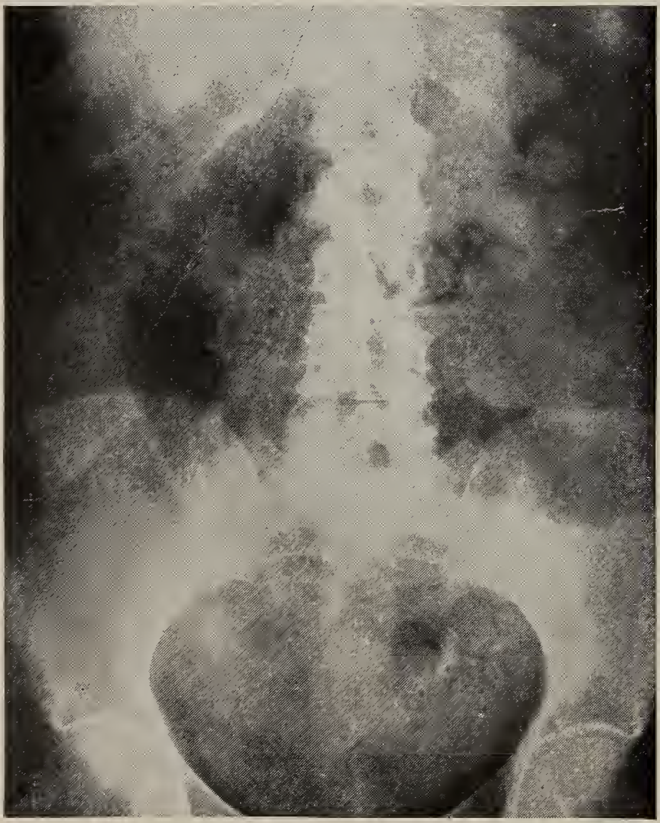

Fig. 3. Case L. Y. Small intestinal dilatation secondary to obstruction of distal ileum by gall stone.

This patient had repeated episodes of gallbladder disease and unlike the previous cases, an accurate timing of the fistulous formation can be obtained. The extruded stone was of such size as to produce violent intestinal colic and, finally, intestinal obstruction. At patient's election, the fistula has not been excised and during a two year period there has been only one episode suggesting cholangitis.

Case 6. C. O. A 78 year old white, widowed, business man had been under observation since the age of 57 for recurrent upper respiratory symptoms, gout and, more recently, for auricular fibrillation with breaks in cardiac compensation. He had never experienced major gastrointestinal symptoms, although he occasionally complained of minor indigestion. On September 19, 1952, the patient complained of inability to evacuate rectum completely and the passage of frequent small liquid stools. On September 23, 1953, the anus was dilated and a rectal impaction removed. The impaction proved to be due to a large gallstone, measuring 10.5 cm. in greatest circumference, which had acted as a ball valve above the anal sphincters. Subsequent x-ray studies demonstrated cholecystocolic fistula. Because of the precarious cardiac status and the absence of complicating cholangitis, operation has been deferred. To date the patient has had one short episode of right upper abdominal pain and fever.

This elderly male had been under close medical supervision for years. It was known that he had a nonfunctioning gallbladder. There is no acute abdominal episode to time the development of the cholecystocolic fistula. His symptoms resulted from the ball valve action of the large gall stone in the rectum. The absence of symptoms of recurrent cholangitis in the continuing presence of the fistula suggests that the cystic duct is not patent.

SUMMARY

Internal biliary fistulae as a complication of biliary tract disease will continue to occur in spite of early diagnosis of cholecystitis and cholelithiasis, and improved surgical technics. That such an observation is justified is indicated by the case studies presented. Cholecystic disease, sufficiently severe to produce serosal irritation, exudation and adherence to surrounding organs with subsequent fistulae formation, can occur in the absence of acute or localizing symptoms. The development of the fistulae or the late results of the abnormal communication between biliary tract and gastrointestinal tract, may be the first indication of disease. Internal biliary fistulae produce symptoms as a result of exposure of the biliary tract to chemical and bacterial irritants, the abnormal release of bile into the colon or the passage of stones sufficiently large to produce intestinal obstruction. In general, the presence of fistulae justify surgical excision. Fistulae, however, can be present for many years without producing symptoms. The relative patency of the cystic duct is probably of major importance in determining the prognosis.

3720 Washington.

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Not So

. . . It is a common belief in the medical profession as a whole that (a) the deafness due to otosclerosis is made worse by pregnancy, (b) a woman with otosclerosis should be advised not to have children, and (c) a woman with deafness caused by otosclerosis can reasonably be advised to have a therapeutic abortion. . . .

. . . There is no evidence that pregnancy has a significant effect on the deafness that is associated with otosclerosis. Otosclerosis is a slowly progressive disease but is one that can be helped with surgery. It seldom, if ever, progresses to total deafness. In the light of these findings there seems to be no excuse for advising therapeutic abortion in a woman with otosclerosis.—Theodore E. Walsh, M.D., St. Louis, *J.A.M.A.*

Post-Radiation Malignancy

. . . potentially malignant fibromatosis may develop many years after excessive radiation therapy.

. . . Involved areas, with all adjacent scar tissue, should be completely excised as soon as recognized. . . . Although cancer is not uncommon after roentgen therapy, fibrosarcoma is seldom reported. . . . In all instances, large doses of ill-planned roentgen treatment had been given as long as six, nine, fourteen, and twenty-seven years previously.—Vernon D. Pettit, M.D., James T. Chamness, M.D., and Lauren V. Ackerman, M.D., St. Louis, *Cancer*.

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Vitamin B_{12} Therapy in Osteoarthritis

JACK ZUCKNER, M.D., *St. Louis*

IN THE TREATMENT of osteoarthritis many medications have been administered because of the lack of any specific therapeutic agent. The difficulties that arise in the management of such patients are well known. Recently, Hallahan[1] reported beneficial results in thirty of thirty-three patients with osteoarthritis after the use of vitamin B_{12}, many getting 100 per cent relief of symptoms. The following study was therefore undertaken.

PROCEDURE

Twenty patients with osteoarthritis were studied (see table 1). Since the evaluation of any therapeutic measure in osteoarthritis is difficult and often unsatisfactory, only patients with peripheral joint involvement were selected so that objective evaluation of improvement could be made. At each examination subjective improvement in pain and stiffness and objective determination of changes in heat, capsular thickening, tenderness, amount of synovial fluid, swelling and range of motion in the affected part were noted. Ability to climb and descend a flight of steps was also observed and was often more informative because of the absence of synovitis in many osteoarthritic joints. A composite estimation of these findings was made and recorded in percent. Joints were examined at weekly intervals in most instances.

There was x-ray confirmation of the diagnosis in all cases.

Vitamin B_{12} was administered intramuscularly, usually once weekly, but in some patients three to six times weekly. One hundred forty-seven injections were given, seventy-seven of 100 micrograms and seventy of 1,000 micrograms.

Placebo injections of saline were given to all patients without their knowledge; in eighteen, placeboes were given before vitamin B_{12} therapy was begun. Ten individuals also received placeboes after several injections of vitamin B_{12} when it was suspected that their response was perhaps psychological; three others had only saline injections.

Hip joints were studied in seven patients, knees in fourteen, shoulders in one and finger joints in two. In most cases more than one joint was being evaluated.

RESULTS

Sixteen of seventeen patients receiving vitamin B_{12} failed to respond satisfactorily. Eight of these showed some improvement but did equally as well on a previous course of placebo injections. Their response was, therefore, considered inadequate. Three patients never received vitamin B_{12} because of marked subjective and objective evidence of improvement during the period of placebo administration making further evaluation difficult to interpret.

Only one individual (C. A.) demonstrated benefit following two separate courses of five and six injections of vitamin B_{12}, each course within a seven day period. This improvement has thus far been maintained for eight weeks by continued once weekly injections with 100 or 1,000 micrograms. When saline was substituted for vitamin B_{12} after one such course, the patient worsened.

Greater frequency of injections did not alter the poor results in six patients who received three

TABLE 1. VITAMIN B_{12} THERAPY IN OSTEOARTHRITIS

Pt.	Age	Joints Studied	Duration of Disease YEARS	Period of Observation DAYS	No. of Injections (mcg) 100	No. of Injections (mcg) 1000	No. of Placeboes	Greatest Frequency of Injections per Week (mcg) 100	Greatest Frequency of Injections per Week (mcg) 1000
C. A.	71	Lt. Hip	7	191	8	20	11	1	6
G. A.	72	Lt. Hip	2	146	8	0	5	1	—
C. B.	70	Knees	3	112	5	0	6	1	—
T. M.	57	Hips	15	84	1	5	5	1	1
A. D.	76	Knees	10	85	2	7	1	1	4
M. D.	63	Knees, Hips	2	154	12	5	11	3	3
E. H.	62	Knees	17	112	6	3	4	1	1
F. H.	69	Knees	10	49	3	4	1	1	3
A. K.	74	Knees	8	134	0	9	7	—	4
J. M.	85	Fingers	10	91	6	0	4	1	—
F. O.	62	Hips	5	25	6	3	2	4	3
E. M.	56	Knees	10	16	1	0	2	1	—
W. S.	80	Rt. Hip	15	121	4	8	6	1	4
T. B.	66	Lt. Hip, Knees	0.5	120	4	0	5	1	—
R. H.	65	Knees	5	136	4	5	1	1	1
S. H.	65	Knees, Shoulders, Fingers	1	84	3	0	7	1	—
L. C.	64	Knees	10	43	0	0	6	—	—
E. H.	65	Lt. Knee	6	42	0	0	4	—	—
L. P.	70	Knees	4	84	0	0	7	—	—
M. K.	72	Rt. Knee	3	84	4	1	4	1	1

Merck & Co., Inc., Rahway, New Jersey, supplied the vitamin B_{12} used in this study.

From the Department of Internal Medicine, St. Louis University School of Medicine, and the Arthritis Clinics of Firmin Desloge, Jewish and St. Louis County hospitals.

to four 1,000 microgram doses in a seven day interval.

There were no untoward reactions following these injections. Occasionally, local pain at the site of instillation was reported by some patients, but this was transient.

DISCUSSION

Evaluation of any medication in the treatment of osteoarthritis is always difficult because of the occasional variability in the disease and, also, the large psychogenic factor that is usually present. The importance of placeboes in any investigation, and particularly in rheumatic diseases, is again demonstrated by the eight patients who did equally well on placebos as with vitamin B_{12} and the three patients who never received vitamin B_{12} because of the satisfactory response to saline injections. The disparity in these results with those of Hallahan[1] may be explained by the failure to use placeboes as reported in his study.

In no patient was there dramatic improvement to therapy as one often sees with cortisone in rheumatoid arthritis[2] or following intra-articular injections of hydrocortisone[3] into rheumatoid and osteoarthritic joints. Increasing the size of the dose to 1,000 micrograms in ten patients had no beneficial effect and increasing the frequency of injections in seven patients also did not effect the poor response except in the one instance previously noted.

SUMMARY

Sixteen of seventeen patients with osteoarthritis failed to respond satisfactorily to vitamin B_{12} administered intramuscularly in doses of 100 and 1,000 micrograms.

The importance of placeboes in such studies is stressed.

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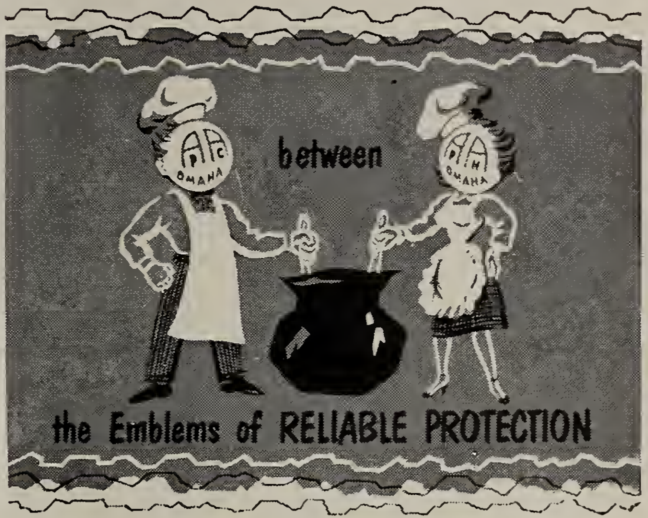
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Newer Antitensives in Toxemic Hypertension

A Review of the Literature

M. H. BACKER, M.D., *St. Louis*

RATIONAL TREATMENT of the specific hypertensive syndrome of pregnancy must await elucidation of its cause. The predominant pathophysiologic phenomenon operative in the syndrome, however, is known, and is shown by Assali and Garber[1, 2] to be a widespread arteriolar vasoconstriction. This constriction involves the arterioles of the kidneys, the afferent arterioles of the brain and the uterine arterioles. It has been shown further by Assali and Garber[1] and Doumoulin,[3] and affirmed by Chesley,[4] that the characteristic vasospasm of pregnancy toxemia is supported by humoral mechanisms and not by neural tone. Thus it is that the symptom, hypertension, is one of the chief targets of therapeutic attack on the disease toxemia. That continued convulsions and death in eclampsia can occur despite satisfactory reduction in blood pressure has been observed by Brown.[5] At the University of Cincinnati Hospital, however, where reduction of blood pressure is a chief tenant of therapy, Garber[6] reports a maternal mortality of 1.5 per cent in the last 205 convulsing eclamptic patients so treated. To be sure, reduction of blood pressure offers some protection against cerebral hemorrhage and acute myocardial failure and, to my knowledge, is not considered undesirable by anyone.

To control this symptom, therefore, many of the newer drugs currently employed in essential hypertension have been tried in the specific hypertensive syndrome of pregnancy. In our outline modified from Wilkins,[7] many of the agents now used in essential hypertension are listed.

- A. Sympatholytics
  - I. Ganglionic Blockers
    - 1. Tetraethylammonium compounds: TEAB, TEAC (Etamon)
    - 2. Pentamethonium compounds
    - 3. Hexamethonium compounds: Chloride, Bromide, Iodide, and Bitartrate (Methium, Bistrium, Hexameton, Esomid)
    - 4. Thiophanium compounds: (Arfonad)
  - II. Centrally acting drugs
    - 1. Dihydrogenated ergot alkaloids: (DHO, Hydergine)
    - 2. Hydrazinophthalazine compounds: (Apresoline)
  - III. Peripherally acting drugs
    - 1. Dibenamine (933F)
    - 2. Priscol
- B. Vasodilators
  - 1. Nitrates
  - 2. Veratrum derivatives: (veratrone, veriloid, verenteral, veraflex, vergitryl, veratavis, veratrabar, cryptenamine, protoveratrine, veralba, provell maleate)
- C. Agents with uncertain mechanism of action
  - 1. Thiocyanates
  - 2. Nitroprussides
  - 3. Pyrogens
  - 4. Rauwolfia serpentina: (Raudixin, rauwiloid, serpasil)

Of these agents, tetraethylammonium compounds, pentamethonium compounds, hexamethonium compounds, a thiophanium compound, a dihydrogenated ergot alkaloid and a hydralazine are the newer agents, and each has been used against toxemic hypertension. Veratrum alkaloids, though in use for more than half a century in eclampsia, are included in this review because their purified derivatives and active principles are only newly available.

Tetraethylammonium compounds were studied by Assali,[1, 8] Garber[2] and Doumoulin.[3] Each noted an insignificant fall in blood pressure in toxemia. They postulated that abolition of neural tone by sympatholytics would not inhibit toxemic vasoconstriction because it is sustained by humoral mechanisms. Assali[8] points out, however, that a test with TEAC (he gives Etamon 400 mg. intravenously) does have value in differentiating preexisting hypertensive disease and acute toxemia.

Pentamethonium compounds are mentioned in a few scattered, generally favorable, case reports.[9, 10, 11]

Hexamethonium compounds, currently so popular in essential hypertension, were used in toxemia by Mulcahy,[12] Morris,[13] Penny and Shekelton[14] and Carey.[15] Mulcahy used hexamethonium bitartrate orally in ten preeclamptics. In only one case did he obtain a significant reduction of blood pressure with tolerated dosage. He records no fetal loss. Morris used hexamethonium in ten gravidae of whom five were pregnant essential hypertensive, three acute preeclamptic and two essential hypertension with superimposed toxemia. He observed an "erratic and unpredictable" fall in blood pressure lasting from three to four hours after intramuscular administration. He believes that the oral route requires too high a dose to be effective. Two newborn infants in Morris' series died of meconium ileus, while a set of twins was stillborn, showing gross "placental infarction." All the mothers survived, however, and none convulsed. Morris concludes that hexamethonium should not be considered in toxemia until customary treatment has failed or the prognosis for fetal salvage is poor or both. Penny and Shekelton treated one case of postpartum eclampsia with a single intravenous dose of 20 mg. of hexamethonium bromide. The blood pressure changed from 210/100 to 140/105, convulsions stopped and the patient recovered dramatically. Carey, in an article on another subject, cites the use of hexamethonium in one case. Effects on maternal blood pressure were not noted but he emphasized that the infant died of paralytic ileus. Important side effects with hexamethonium were postural hypotension, nausea, constipation, urinary retention, blurring vision and concentration of the drug in the liquor amnii.

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A thiophanium compound, Arfonad, was studied in toxemia by Assali et al.[16] They find that it also blocks autonomic impulses at the ganglionic level. It is most effective by intravenous drip, for a single intravenous dose is effective for only three to ten minutes. The intramuscular route has no value. The pressure drop is most marked in normotensive gravidae and in those with essential hypertension; the drop in toxemia is much less marked. The hypertension of acute toxemia superimposed on essential hypertension is lowered by this drug if given by continuous intravenous drip. Another possible use for this drug arises if a gravida's essential hypertension assumes a malignant form. Arfonad's side effects are tachycardia, nausea, vomiting and shock.

A dihydrogenated ergot alkaloid, Hydergine, was used by Kaser[17] in toxemic hypertension, in most cases in conjunction with protoveratrine. He believes that the blood pressure was affected little or not at all by this drug. He points to the utility of its mild oxytocic effect in some cases when given by intravenous drip.

A hydrazinophthalazine compound, Apresoline, currently widely used in the treatment of essential hypertension was also studied in toxemic hypertension by Assali et al.[16] With a single dose of thirty milligrams intravenously they noted the following: In normotensive gravidae a slight drop in pressure; in acute toxemia, a marked fall (averaging 26 per cent systolic and 43 per cent diastolic); and in essential hypertension with superimposed toxemia an intermediate effect (averaging 11 per cent systolic and 19 per cent diastolic). The hypotension induced by a single intravenous dose lasted from four to twenty-two hours. Effects of the drug given intramuscularly and per os were poor. Tolerance was noted to develop after repeated intravenous injections. No effect on fetuses was mentioned. Side effects were tachycardia, headache and nausea. Cohen[18] reports a fatal reaction presumably to Apresoline in a 28 year old Indian gravida with preeclampsia who received only 25 milligrams three times daily after meals for only two days. He ascribes death to an ultrasensitivity to the drug, but it is difficult to be certain from his case report that the patient did not actually die of eclampsia. Nonetheless, his advice that the starting dose be only 10 milligrams three times daily is probably sound.

Dibenamine, 933F, was used in toxemia by Assali,[19] who found it ineffective and that it produced disturbing side effects.

Veratrum derivatives, Assali[1, 20] and Garber[2, 6] repeatedly emphasize, elicit an almost specific responsiveness in toxemic hypertension. Lack of standardization of its active principles, marked side effects in the therapeutic range and inefficacy of the oral route have heretofore prejudiced many against its use. Numerous studies[2, 6, 20, 21] attest to the efficacy of extracts of the crude drug. Its mode of action is unknown and it does produce a transient decrease in urinary output. No mention of ill effects to fetuses was found. Side effects are nausea, vomiting and bradycardia. In the last few years, standardized, sterile and stable veratrum preparations have become available which, according to Baird and Assali,[22] produce adequate vasopression, given parenterally, with less vomiting than do the crude extracts. Finnerty[23] reports the use of a similar standardized purified derivative parenterally, producing satisfactory vasodilation but with nausea and vomiting an almost constant problem. In 1950 Meilman and Krayer[24] studied the pure veratrum alkaloids protoveratrine and veratridine in essential hypertension. They believe these alkaloids to be the active principles of crude veratrum and find that intravenous protoveratrine lowers essential hypertension for long periods of time without side effects. Veratridine, however, produces short lived dilatation with marked vomiting. Kaser[17] gave protoveratrine to fifty-two gravidae with various forms of hypertension. He gave it twelve times by intravenous drip, three times by single intravenous injection, eleven times intramuscularly and twenty-one times per os. He encountered nausea and vomiting in only six cases; to these the drug had been given intravenously. Five eclamptic patients so treated all lived, two convulsed again after treatment, and eight babies died. None of thirteen preeclamptic patients ever convulsed. Unfortunately, he makes no direct statement regarding the results of the protoveratrine in those given the drug orally, but he does conclude that the use of the pure alkaloid protoveratrine is a forward step in the management of toxemic hypertension. Hoobler et al[25] report that oral protoveratrine is effective in essential hypertension (in nonpregnant individuals).

Rauwolfia serpentina, enjoying considerable popularity in the treatment of essential hypertension, has not, to my knowledge, been reported upon in the management of the specific hypertensive syndrome of pregnancy.

Combined therapy, employing veratrum and apresoline was tried by Assali et al[16] in toxemic hypertension and they commend it highly. They found that one half of the usually effective dose of each drug given together produces the same pressure drop as a full dose of either, without the side effects of either.

DISCUSSION

Since the hypertension of toxemia is maintained by humoral mechanisms, agents which abolish neural tone would not appear to offer much in its control. In the studies of these agents in toxemia this appears to be borne out. I feel it is pertinent to quote Assali[16] on this point, who has investigated this syndrome so extensively: "Since it has been shown that the hypertension of acute toxemia of pregnancy responds very poorly to autonomic and adrenergetic blocking agents such as TEAC, spinal anesthesia, etc., it is logical to assume that these agents have very little place in the management of the disease." It is true, on the other hand, that many women with essential hypertension do become pregnant and that their hypertension should respond, at least in part, to ganglionic blockers. This is also borne out in the clinical trials. It seems difficult to deny that the hexamethonium compounds kill babies by producing paralytic ileus in them. Since, then, the ganglionic blockers (1) do not antagonize the humoral factors supporting toxemic hypertension, (2) can cause fetal death due to paralytic ileus (hexamethonium), and (3) must be given parenterally (indeed, almost all intravenously) they cannot be regarded as valuable drugs in the specific hypertensive syndrome of pregnancy. In fact, it would appear that the only times they should be used are (1) in the differentiation of acute toxemia from preexisting essential hypertension (TEAC test), (2) if the baby is dead or nonviable and the other measures fail (hexamethonium), and (3) in malignant crises of essential hypertension (Arfonad).

The centrally acting drug, Apresoline, appears to exert its effect on the midbrain and vasomotor centers. It antagonizes the hypertension of acute toxemia well and to a lesser extent antagonizes essential hypertension with superimposed toxemia. Unfortunately, it, too, must be given intravenously which limits its use to the hospitalized and relatively ill gravida. Of the newer hypotensives, therefore, it is one which makes a distinct contribution to the management of the specific hypertensive syndrome of pregnancy when given alone or with veratrum alkaloids.

Among the vasodilators the new pure alkaloids of veratrum, notably protoveratrine, are proving of considerable value in toxemia. In 1941, Goodman and Gilman[26] in their textbook of pharmacology say of veratrum viride: "The drug is practically obsolete today and enjoys a deserved oblivion." In an editorial note in the 1953-1954 "Year Book of Obstetrics and Gynecology," Greenhill[27] says: "Veratrum viride in one form or another is being used more and more in this country with increasingly good results. . . . Therefore, we shall have to revise our attitude, which was based on the old drugs." It would appear that protoveratrine, moreover, is effective intravenously, intramuscularly and per os, and does not compromise the fetus. If the distressing vomiting which has beleaguered its use so long is truly eliminated in protoveratrine, veratrum indeed would appear to be the drug of choice for the management of toxemic hypertension.

SUMMARY AND CONCLUSIONS

1. Ganglionic blockers are of little value in the specific hypertensive syndrome of pregnancy; they will antagonize only hypertension supported by neural tone.

2. Hexamethonium compounds are contraindicated in pregnancy since they concentrate in the liquor amnii and can cause fetal death by meconium ileus.

3. Apresoline, intravenously, in the hospitalized gravida, is valuable in acute toxemia, and is valuable in essential hypertension with superimposed toxemia.

Protoveratrine, a pure veratrum alkaloid, is the most valuable of the newer antitensive drugs in toxemia. Even orally, though yet unproven, the drug offers provocative promise.

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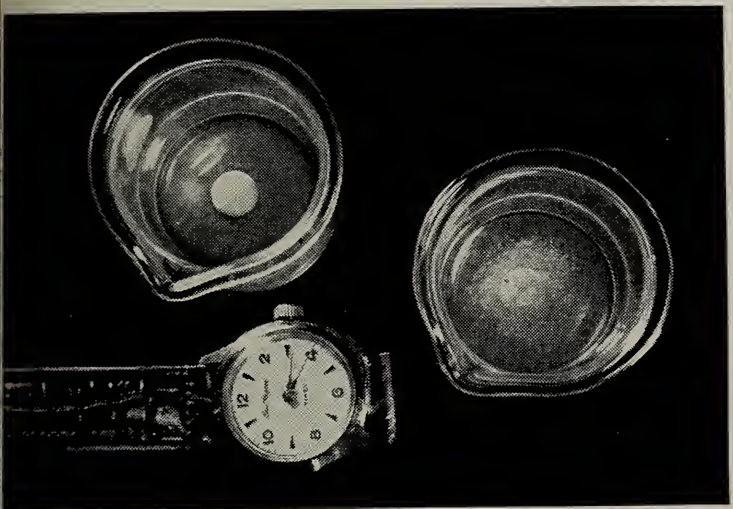

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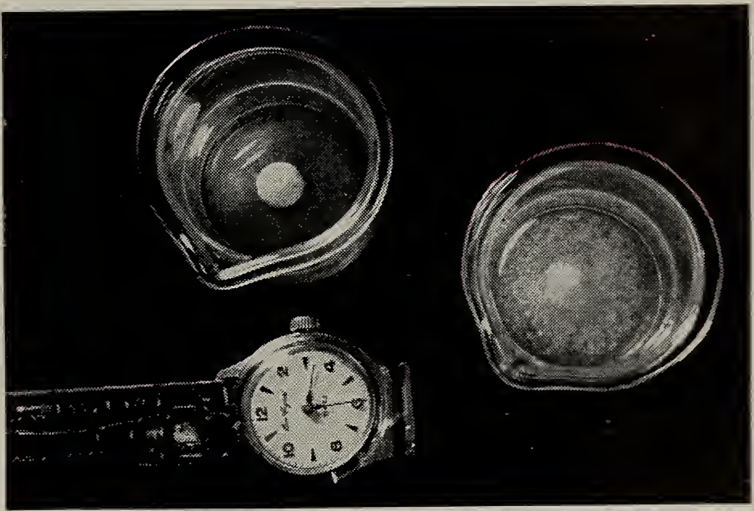

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Postgraduate Review

Sex Hormones

Some of Their Uses

DANIEL L. SEXTON, M.D., *St. Louis*

THE WIDE USE of sex hormones during the last two decades has afforded opportunity to evalute results and allows the outlining of treatment of certain sex disorders with reasonable soundness. The secretion of sex hormones in both sexes is dependent upon the pituitary gonadotropins and, without adequate and balanced gonadotropic stimulation, end organ secretions in both the female and the male will be altered, resulting in one form or another of sex dysfunction.

FEMALE SEX DISORDERS

In the female the ovarian hormones, estrogen and progesterone, influence endometrial growth, regulate the menstrual cycle and have a direct effect on body function as a whole, chiefly through the autonomic nervous system. Most sexual disorders of the female are best attacked by the use of one or both of the ovarian hormones, though in some instances in which pituitary suppression is the objective, the male hormone, testosterone, is equally or more effective. All of the sex steroids are effective orally and, for the most part, sufficient amounts can be given by this route. Large doses of any of the steroids suppress pituitary function, thereby eliminating gonadotropic stimulation, while smaller doses seem to stimulate gonadotropic action. When estrogens are indicated, diethylstilbestrol,* which is unlike the steroids chemically but acts like an estrogen within the body, is most potent weight by weight and is often the agent of choice. Some of the sex disorders of the female and proposed plan of treatment for each are as follows:

1. *Vaginitis and Vulvo-Vaginitis.*—(a) When the gonococcus is the cause of the condition in the infant and child and when antibiotic therapy has failed, topical estrogen therapy with juvenile sized suppositories results in a change in the vaginal epithelium to a more adult type with a lowering of the pH to a level that is unfavorable to the growth of the infecting organism. The insertion of a juvenile suppository containing either stilbestrol 0.1 mg. or estriol 0.2 mg. nightly for a period of three to six weeks should effect a cure. In the case of nonspecific juvenile vaginitis caused by an organism of lower virulence, one suppository nightly for three to six nights should suffice to overcome the infection.

(b) *Senile Vaginitis.*—Vaginal suppositories containing stilbestrol 0.5 mg. or estriol 0.4 mg. inserted nightly for a period of four to six weeks will result in the development of persistent active epithelium which will greatly improve or overcome this form of vaginitis and its associated symptomatology. The result is enhanced by adding oral estrogen therapy, using moderate doses of any of the estrogens, omitting treatment for seven to ten days each month so as to avoid withdrawal bleeding. For pruritus of the vulva due to ovarian deficiency an ointment containing enough stilbestrol to allow 0.5 mg. per application or estrone sulphate cream containing 0.625 mg. per gram, is efficacious.

2. *Delayed Onset of Menses and Oligomenorrhea of Adolescence.*—Before embarking upon the treatment of these conditions, thorough examination of the girl is essential. Any organic disorder that is encountered should be corrected, for the correction of such may result in the establishment of a normal menstrual cycle. If there is any indication of thyroid deficiency, thyroid therapy should be employed for a period of four to six months to see if normal menses will not follow. If not, the aim of treatment is to duplicate the normal occurrence of the ovarian hormones in the body. For this purpose stilbestrol in doses of 0.5 to 1 mg. daily for twenty days is prescribed. On the eighteenth day of stilbestrol therapy, oral progesterone, 10 mg. daily, should be added for a period of six days. Treatment is then omitted for seven days, during which time vaginal bleeding may occur. If bleeding does not occur, the procedure is repeated. Should bleeding begin during the course of therapy, treatment should be interrupted until one full day after the cessation of bleeding, when it is to be resumed on the schedule outlined. Three to four series of this plan of estrogen-progestrone therapy should be carried out before evaluating results. Following three or four regular cycles of vaginal bleeding, rather than withdraw both estrogen and progesterone, it is best to withdraw the estrogen and continue progesterone for an additional three months, giving 10 mg. daily for six days beginning about the eighteenth day of the cycle. In carrying out this plan the endometrium can often be primed properly and a regular menstrual cycle established.

3. *Menorrhagia of Adolescence.*—Functional uterine bleeding in the adolescent girl is due in most instances to a lack of the corpus luteum hor-

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* To be referred to hereafter as "stilbestrol."

mone. The administration of progesterone orally, 10 to 20 mg. daily, beginning on the fifteenth day of the menstrual cycle and continued for ten days quite frequently will result in a menstrual period that approaches normal. Should this plan fail, the addition of 25 mg. of progesterone intramuscularly two to three times during the period of oral progesterone therapy may bring about the desired result. To control excessive and prolonged menstrual bleeding that is in progress, testosterone propionate, 100 mg. intramuscularly daily, may be administered until bleeding subsides. Testosterone suppresses pituitary function with subsequent withdrawal of the stimulating force that continues the bleeding. Stilbestrol orally in doses of 5 to 25 mg. daily or, according to Greenblatt,[1] sodium estrone sulphate intravenously in 20 mg. doses every twelve hours may have the same effect. It has been pointed out that many types of endometrium, such as proliferative, cystic glandular hyperplasia, progestational, acyclic and even atrophic endometrium, may be found in functional uterine bleeding. Strange as it may seem many of these phases of endometrial response may also be associated with amenorrhea. For this reason in stubborn cases of menorrhagia of adolescence best results can be obtained only by attempting to duplicate the natural ovarian hormonal secretions. This is accomplished by the use of stilbestrol, 0.5 to 1 mg. daily for twenty days, and progesterone 10 mg. daily, starting on the eighteenth day of stilbestrol therapy and continuing for six days. Again, if desiccated thyroid is indicated, it should be added in doses as tolerated. After excessive bleeding is controlled, the administration of 10 to 20 mg. of progesterone orally for 10 days, beginning on or about the fifteenth day of the menstrual cycle, will in most instances control menorrhagia. This plan, if carried on for three or four months may serve to correct the hormonal imbalance.

4. *Dysmenorrhea.*—The results of hormonal treatment of dysmenorrhea are unpredictable. When cramping is associated with irregular or scant menses and gonadal function is diminished, treatment as outlined previously under the heading "Delayed Onset of Menses and Oligomenorrhea of Adolescence" may be employed.

In those instances in which menses are regular and sex function is considered normal, the suppression of ovulation with stilbestrol 2 mg. daily for twenty-five days beginning with the onset of menses may bring about painless bleeding from a proliferative endometrium. Three or four such cycles may interrupt or modify the pain. If this plan prolongs the cycle and the time of menstruation becomes uncertain, stilbestrol may be administered at the first indication of pain in doses of 5 mg. daily and continued until pain subsides or lessens. Ovulation may also be suppressed with testosterone buccal tablets, 20 mg. daily beginning the sixth day of the menstrual cycle and continuing for ten days. This program also may disturb the menstrual cycle. If so, treatment may be withheld until pain occurs and the plan instituted with the hope that the patient may have a few months free of pain. The psychic state of the patient should be investigated in all instances of functional dysmenorrhea.

5. *Premenstrual Tension.*—Premenstrual tension is a finding more common in women than one suspects. Careful history taking will reveal that during the week before onset of menses in women in their mid thirties and older, a variety of symptoms develops. The severity and degree of symptoms depends to a large degree upon the psychic stability of the individual. A large majority of these patients respond to progesterone orally, 10 mg. daily the week before the onset of menses. Those not benefited by this plan of treatment may be given small doses of stilbestrol, 0.1 to 0.2 mg. daily for eighteen days, starting treatment on the day following the cessation of menses. In those not affected by these plans, testosterone propionate, 10 to 20 mg. daily for a week before onset of menses, may be tried.

6. *The Climacteric.*—This term includes those few years before the actual cessation of menses, the actual menopause, and those years following the menopause, referred to as the adjustment period. In most women this often covers a span of some twelve to fifteen years. During this time many women develop symptoms of a bizarre nature and degree. The most commonly referred to menopausal symptom is the hot flash or flush. Although in many women the climacteric is characterized by a decrease in blood estrogens and an increase in pituitary gonadotropin, these findings are by no means constant. It is an established fact, however, that many of the symptoms of the menopause are relieved by estrogens. Since, in practice, one is interested in therapeutic results and not in laboratory controls, the use of estrogens during the menopause is indicated by the results obtained. The most constant and characteristic menopausal symptom, the hot flash or flush, with few exceptions responds to estrogen therapy. Vague body aches, headaches and other nervous manifestations referable to the cardiovascular and gastrointestinal systems may become annoying symptoms. Many of these and other symptoms attributed to the menopause may be altered or modified but not completely relieved by estrogen therapy. Not infrequently at the menopause constitutional variations of peronsality come to surface and express themselves in a disturbing manner, such as anxiety, depression states or even quiescent schizoid traits. In each instance the patient should be completedly evaluated and organic disease corrected as completely as possible. When organic disease occurs in conjunction with disturbing menopausal symptoms, the latter should be treated but given a place of secondary therapeutic importance.

Oral therapy for the most part suffices. Stilbestrol, while effective, may bring about withdrawal bleeding in a woman in whom menses have ceased. The omission of stilbestrol usually results in a cessation of the bleeding but not always and, with the persistence of bleeding, a diagnostic problem arises that requires curettage. For this reason it is better to use some other form of estrogen. Estrone, estrone sulphate and estrogenic substances have become popular in the treatment of the menopausal syndrome because of the feeling by many physicians that these estrogens produce an overall sense of well-being and are not likely to precipitate bleeding. In some women, however, endometrial response is unusually sensitive and bleeding may occur with any estrogen employed. The interruption of treatment with these last-named estrogens, however, usually results in cessation of bleeding. Estinyl estradiol, 0.02 to 0.05 mg. by mouth daily, or estrone sulphate 0.3 to 1.25 mg. by mouth daily with treatment being interrupted one week out of each month, will in most instances alleviate the maojrity of the unpleasant symptoms of the menopause. Additional therapy in the form of estrone 10,000 units intramuscularly once to twice weekly, or estradiol benzoate 1.66 mg. once weekly, or estrogenic substances 0.5 to 1 mg. once to twice weekly, may be employed if necessary. After three to four months' treatment it is well to omit all treatment for a month, then repeat if necessary. Most patients interrupt treatment themselves when they feel better and may return later should there be a return of symptoms. It is a good rule to give only the minimum of estrogen therapy necessary to control symptoms. Before starting treatment a complete physical examination should be done and if there are any breast nodules or questionable pelvic pathology that could be interpreted as cancer or precancerous, estrogens should be omitted. While the carcogenic effect of estrogens in women is not established, it is a known fact that hyperplasia of the breast has been observed in men in whom large doses of estrogen have been given for prostatic cancer. While the data is not conclusive it suggests caution in the prolonged and indiscriminate use of estrogens. This is particularly important when there is a strong family history of cancer or when previous episodes in the patient's history lead to the suspicion of cancer.

The combined use of estrogen and androgen in the menopause has been advocated by Glass[2] and others. Advocates of such feel that the combined use of these steroids is more effective in suppressing pituitary function. They also believe that these mixtures bring about a smoother transition from a reproductive to a non-reproductive physiology incident to the menopause. I agree that this combination of steroids is more effective than estrogens alone. Ten to 20 mg. of testosterone propionate administered with 0.33 mg. of estradiol benzoate intramuscularly once to twice weekly will yield maximum results and should be the choice of treatment in the more difficult menopausal problems.

7. *Metastatic Lesions.*—Metastatic lesions resulting from cancer of the prostate are frequently benefited by estrogen therapy. Just how much estrogen should be employed is not agreed upon, but good results have been reported following the ingestion of as little as 5 mg. of stilbestrol daily to as much as 150 mg. daily. A new synthetic estrogen tri-p-anisylchlorethelyne (Tace) has given evidence of relieving the metastatic pain of carcinoma of the prostate more than stilbestrol or the other estrogens. Doses of 12 to 24 mg. daily are ingested with storage taking place in the fat depots of the body and utilization being constant and prolonged. Some urologists follow the practice of employing estrogen therapy first, then if satisfactory results are not forthcoming, orchidectomy is performed. From reports received, the endocrine treatment of prostatic cancer is superior to other forms of therapy, but falls far short of fulfilling all requirements for the treatment of this entity. Heckel[3] relates that Huggins has observed that when estrogenic hormones are used in the treatment of cancer of the prostate, results fall in one of three categories; there may be no effect on the cancer, there may be regression of the primary neoplasm and its metastases, or there may be retrogression of the primary neoplasm with progression of the metastases. Heckel,[3] writing on this subject, sums it up as follows: "While there are so many questions that remain unanswered in the endocrine treatment of prostatic cancer, great progress has been made in the treatment of the disease however, and as a result these patients have been given a longer and more comfortable span of life."

SEX HORMONE THERAPY IN THE MALE

The effects of gonadal deficiency upon the development of the individual depends upon the time of life deficiency first appears. Prepuberal hypogonadism results in poorly developed external genitalia and secondary sex characteristics. Should the hypogonadism come on after puberty male sex characters are developed but diminished. Careful history taking is essential in all forms of gonadal deficiency for it must be remembered that gonadal deficiency may be secondary to a tumor of the anterior hypophysis, to hypopituitarism, and may follow infection involving the testes, such as mumps or orchitis. The type of sex hormone therapy to be employed depends upon the age of the patient to be treated.

1. *Cryptorchism.*—In the case of the pre-adolescent or adolescent boy with cryptorchism or faulty testicular development stimulation therapy should first be employed. For this purpose pituitary gonadotropins would be desirable but, unfortunately, they are not available. The pituitary-like gonadotropin obtained from chorionic fluid and re-

ferred to as chorionic gonadotropin, stimulates the interstitial cells of Leydig and is the most effective preparation available for testicular underdevelopment. When cryptorchism is to be treated, the individual case must be considered. First, it is undesirable to treat cryptorchism in boys less than 10 years of age for before that age response is slow and disappointing. Best results are obtained when the testicle can be felt in the inguinal canal and when it is of small size. In those cases in which the testicle approaches normal size and can be palpated in the inguinal canal it is almost a certainty that some mechanical restriction is preventing descent, in which case surgery should be resorted to. From 500 to 1,000 international units of chorionic gonadotropin injected two to three times a week until a total of 10,000 units have been administered will usually foretell the final outcome of treatment. If results have been encouraging but not completely satisfactory, a rest period of six to eight weeks may intervene, followed by a similar amount of treatment. In about one third of such cases treated, descent occurs. In those instances in which the testes are not palpable in the inguinal canal, results for the most part are disappointing. The only justification of treating such cases is that a testicle too small to be felt may become palpable after such a plan of treatment.

2. *Delayed Adolescence.*— It is my belief that delayed adolescence should be treated with chorionic gonadotropin so as to forestall undesirable psychologic traits which frequently accompany delayed maturity. Again from 500 to 1,000 international units of chorionic gonadotropin two to three times weekly until ten to twenty thousand units have been administered usually brings about satisfactory results. If, however, chorionic gonadotropin does not prove to be wholly effective, the addition of methyl testosterone, 10 mg. orally as sublingual tablets, or testosterone propionate, 10 mg. daily in the form of buccal tablets, will hasten masculinization. It may be necessary to continue such treatment for a period of four to six months, being interrupted from time to time.

3. *Adult Hypogonadism.*—Hypogonadism in the adult responds effectively to substitution male hormone therapy. The extent of improvement will be dependent upon the age at which therapy is undertaken, those at puberty showing a more striking improvement than those in early adult life and far more so than older men. In milder forms of gonadal deficiency, methyltestosterone or testosterone propionate, buccal tablets in 20 mg. daily doses, usually suffices. For advanced cases it may be necessary to give intermuscular injections of testosterone propionate, 100 mg. two to three times weekly until eight to ten hundred mg. have been administered, following which time oral therapy will be sufficient with the addition of an occasional intramuscular injection.

4. *Male Climacteric.*—It has been repeatedly observed that decreasing testicular function associated with normal ageing is accompanied by signs and symptoms of the neuro-vegetative system. Fatigue, poor memory, inability to concentrate, increased irritability, heightened nervous tension, melancholia, depression, somnolence and restless sleep, are common complaints secondary to testicular let-down. Should these symptoms be alleviated by testosterone therapy, one is certain of the diagnosis of gonadal deficiency. It is generally agreed that a sense of well being follows testosterone therapy and the patient usually feels the value of treatment sufficiently to be the judge of its effectiveness. It should be pointed out that all complaints occurring during the years of middle or later life are not due to testicular deficiency. Careful consideration should be given to the complaints of patients in this age bracket for the possibility of organic disease. Complete evaluation of the patient's complaints by detailed history, examination and special tests should be undertaken before concluding that the complaints are of functional nature. The oral administration of 25 mg. of methyltestosterone daily for a thirty-day period will serve as a good therapeutic trial. If the patient is benefited, treatment can be continued and perhaps enhanced by the administration of 100 mg. of testosterone weekly or bimonthly. For infrequent injections depotestosterone, an aqueous suspension of minute crystals, offers prolonged absorption. Impotence in sexually normal men between ages of 30 and 50 years is frequently the result of psychic and mental fatigue and is not corrected by testosterone therapy, nor are the anxieties that occur at this age. The indiscriminate use of testosterone in middle aged men is unwise and should be avoided. Evidence of prostatic hypertrophy is a contraindication to its use.

CONCLUSION

Sex hormone therapy offers help in both sexes for a number of clinical entities in which a deficiency exists. It may be employed to stimulate gonadal development or as replacement therapy. Its use should be judicious and with specific indication. Their indiscriminate use, especially in the middle aged and older people of either sex, should be avoided. A good rule to follow is that the minimum amount of therapy should be employed at all times. Patients under treatment should be interviewed sufficiently often to detect any untoward symptoms that would preclude continued therapy and should treatment be prolonged they should be periodically re-examined.

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Case Report

Blood Donor Fatality

Due to Axillary Vein Thrombosis and Pulmonary Embolism

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COMPLICATIONS ARISING from blood donations, as a rule, are rare. Simple syncope and transient cerebral anemia are the most common immediate aftereffects. Discomfort around the antecubital region has been reported in 10 per cent of donors.[1] Thrombophlebitis on the punctured vein is reportedly unusual.[2]

The growing frequency of intravenous medications since the last decade has increased vascular trauma in many individuals. Yet the incidence of thrombo-embolism has remained about the same today as it was years ago.[3] Moreover, thrombosis following blood donations is infrequent, the first reported case to my knowledge having been written only in February, 1953, by Jennings and Jones.[4]

Due to increased demands for blood donation nowadays, the dangers occurring therefrom are apt to be minimized. But such minimization may cast a false sense of safety in the procedure if accidents that happen after them are kept from the knowledge of technicians. If only to reemphasize the precautions oft sermonized regarding asepsis, correct atraumatic technic of venipuncture and watchful after care, this first blood donor fatality due to thrombosis and pulmonary embolism is reported.

REPORT OF A CASE

A 33 year old well built, well nourished white male was admitted to the St. Anthony Hospital (St. Louis) on June 29, 1952, with severe chest pains of four days duration. Present illness had a sudden onset four days prior to admission as a "severe, sudden, persisting and stabbing pain" over anterior chest and epigastrium, more profound at the left hemithorax, aggravated by deep inspiration, without cough or hemoptysis. Dyspnea, night sweats and general discomfort were distressing. Not improved by antibiotics and other symptomatic therapy, he was admitted to the hospital. His past history revealed that he was in such perfect health that he donated blood at the local blood bank center three weeks prior.

At the time of admission, his temperature was 99.3 F., pulse rate 100 and respiratory rate 28, blood pressure 130/90. He was noncyanotic, rational and cooperative but apprehensive. Physical findings were nonrevelatory except for a nontender cordlike induration in his left arm running from the antecubital region toward the axillary region.

Laboratory findings revealed hemoglobin 14 gm. (90 per cent); color index 0.8; red blood count 5,400,000; white blood count 7,950, and a differential of 2 stabs, 72 segments, 25 lymphocytes, 1 monocyte, with a negative serology. Urea nitrogen was 20.8 mg. per cent and blood sugar was 100 mg. per cent. Electrocardiogram showed left axis deviation and chest plate was indicative of "some pneumonitis, possibly with pleuritis at left base." Despite penicillin, codeine and aspirin for pain, and sedatives, the clinical picture did not improve. On the third hospital day, temperature spiked to 102 F. and remained near that height for the rest of the week. Rales were picked up at the right base and meantime x-ray showed "pneumonia in the right lower lobe, pneumonitis or small amount of fluid at the left base; the process in the right was new."

On the second week, physical findings were slightly improved and dyspnea and temperature almost gone. He developed, however, some hives and medications were stopped and antihistamines started. At this stage, dyspnea recurred and precordial pain reappeared. A consultation prompted a sputum examination for Kock's bacillus and was twice reported as negative. Sedimentation rate was 23 mm. in 60 minutes and hematology revealed hemoglobin of 15 gm. (97 per cent); color index 0.9; red blood count 5,300,000; white blood count 11,900; differential 2 eosinophils, 6 stabs, 71 segments, 17 lymphocytes and 4 monocytes. Urinalysis was normal. An x-ray thirteen days after the second plate showed "some clearing at the right base with little change in the increased density at the left base."

Chest pains were worse the next day and nausea and hyperhidrosis entered into the picture. On the morning of July 19, 1952, the patient was found lifeless in the bathroom.

Necropsy Report (Dr. B. C. Portuondo, Pathologist).—"Autopsy was done two hours postmortem with the essential finding of a firm cordlike structure palpated along the left cubital area and lower brachial region; slight cardiac enlargement to the right side; saddle thrombus at the bifurcation of the pulmonary artery; multiple discrete wedge shaped purplish firm-and-soft areas distributed throughout the lung fields and microscopic findings of the thrombus consisting of festoons of eosinophilic accellular masses with the whole blood; multiple areas throughout the lungs show necrosis and some have a periphery of fibrous tissue, while others were infiltrated with neutrophils."

COMMENT

Thrombosis of the axillary vein develops from a variety of causes. It may occur after any effort in ordinary arm usage[5] or even without any definite antecedent cause.[6] Some factors have been

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known to have definite bearing in the formation of intravascular clotting: John Hunter's "Circulating Blood Alteration," as proposed in 1793; Virchow's "Retardation of Blood Stream by Mechanical Agents," 1846; Brucke's "Blood Vessel Wall Alteration," 1856; Howard's "Venous Flow Retardation"; Cummine and Lyan's "Fibrinogen B. Action"; Kay and coworkers' "Antithrombin Deficiency"; and later ideas on excessive platelet formation in rapid blood destruction, and blood sludging in shock, surgery and infection; and certain drug actions.[7] By and large, its etiology still remains obscure although it is known to be associated with recumbency and quiescence as in heart failure and in marantic forms as in terminal stages of chronic diseases, rheumatic diseases, carcinogenetic conditions, blood dyscrasias, varicosities and hemostasis, trauma and effort, chemical irritation, ischemia and thromboangitic phenomena and in septic and idiopathic conditions.[8]

It has been pointed out by Eigen, however, that trauma to the intima of the veins is an important factor.[9] Venipuncture in intravenous medications and in blood donor or recipients, is normally closed by means of the vessel wall elasticity with fibrin deposition in the punctured wall. The clot formed to patch a puncture may start a slowly building thrombus. Venospasm through sympathetic stimulation may cause blood flow changes.[9, 10, 11] If the vein ever gets infected or inflamed, a phlebitis may ensue. The roughened intima contributes to the further formation of matured or fixed thrombus, which may in turn, diminish the vascular lumen, hence slow down the blood flow. Add to these, the possible colloidal modifications in the edematous endothelial cells, and platelet adhesions are encouraged.[12] Then it is imaginable that an axillary vein thrombosis may follow venipuncture. The thrombus thus formed may break up into particles which may be swept off in several showers to produce pulmonary embolism. Such a sequence of events may have been the pathogenetic gamut that occurred in the case reported, starting from post-venipuncture thrombosis and thrombophlebitis and ending in repeated showers of pulmonary embolism as could be deduced by the presence of peripheral fibrosis in some of the areas involved.

SUMMARY AND CONCLUSIONS

A case of blood donor complication involving axillary vein thrombosis and subsequent pulmonary embolism is reported as the first blood donor fatality. This does not mean, however, that blood donation is a dangerous and an undesirable procedure. We wish to emphasize that such complications are rare, but physicians and technicians involved in blood donation programs should acquaint themselves with such accidents. Only by knowledge of such rare possibilities can conscious care best be appreciated and emphasized.

Acknowledgment: Gratitude is herein expressed to Drs. E. Rund and R. Brennan under whose Service the above case was admitted; to Dr. B. C. Portuondo, Pathologist; and to the Record Department, St. Anthony's Hospital, St. Louis, Mo., for their cooperation in this report.

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ASIC PHARMACEUTICALS FOR NEEDS BASIC TO MEDICINE

Special Articles

Unanswered Questions in American Education

THE VERY REVEREND PAUL C. REINERT, S.J., *St. Louis*

I SHOULD LIKE to begin by asking you to indulge in a little make-believe. Suppose that some weeks ago you received an advance notice outlining the program of topics to be discussed at this St. Louis meeting of the Missouri State Medical Association. Suppose that instead of very learned, highly specialized discussion questions, only the following appeared: Who is and who should be a medical doctor? Who is and who should be a patient? What are a doctor's chief responsibilities? I am sure all of you would have been amazed at such a proposed program. To place such naive questions on the agenda of this venerable association would set the medical profession back at least fifty if not one hundred years!

As a nonprofessional layman in medical matters I am not competent to judge whether or not that would be true in your field of specialization but I should venture to suggest that questions just as basic and possibly naive still have to be answered by all of us who should be interested in our American educational system. I submit that at this late date there are still certain fundamental issues about our American schools which we Americans have not faced up to; questions to which we have failed to give practical answers either as a unified nation or as a convinced majority. Because I think these questions must be answered for the lasting welfare of our people, I am being bold enough to summarize a few of them for you this evening in the fervent hope that such a capable, distinguished group will ponder these issues and arrive at logical penetrating answers.

The first question is this: Do we Americans really think the teaching profession is vitally important? In all these questions I am not interested in cliches, in a ready lip service answer. I am interested in the practical answer evidenced by our every day actions and attitudes. To some parents the chief importance of the teacher seems to center in the fact that they can with a sigh of relief toss to the teacher their parental responsibilities and obligations. These are the ones who blame the teacher if Jackie fails, but swell with a sense of their own accomplishment if Jackie succeeds in his studies. Or, still worse, how often we run into a situation that may exist anywhere from the early years of grade school up into college years in which a father or mother actually connive with their child against the poor teacher's honest efforts to educate the boy or girl. Possibly the most accurate test of all as to the importance we Americans attach to the teaching profession is the social and economic status in which we are content to place them. In spite of many notable exceptions, teachers by and large are not afforded the respect, the prestige, the social respectability which should be the normal expectation. Surely we Americans are most careful when we measure values by the dollar sign. Yet the average salary of the teachers in our elementary and secondary public schools today is $3600, with large numbers of them getting $2000 or less. After comparison with the salaries of brick-layers, accountants, or even with those who have spent a like number of years in professional training, can we still say that we think teachers are important?

And if we still insist that they are most important, what are we doing in this country now to guarantee that we will have a sufficient number of these important people in the years immediately ahead? Our population is increasing fantastically. Think of this for example: the number of people of college age will increase from the present 8,800,000 to 11,000,000 in 1960 and to 15,000,000 in 1970. And in the elementary and high school levels the shortage is already alarming. Next year 150,000 additional teachers will be needed whereas only 75,000 will graduate from our teacher training institutions. In 1960 we will need 900,000 new teachers, yet at our present rate of training we will have prepared only 400,000—a shortage of one half million teachers just a few years from now!

I shall not belabor the point further. It should be obvious that if we are sincere in answering this first question by asserting that teachers are one of the most essential forces in maintaining the welfare of coming generations, then we Americans must all join in doing something about the teacher's position in parental relationships, his or her standing in the community, the teacher's economic status—and this, not merely for the benefit of our current sadly depleted teaching corps but in order to provide the thousands of capable young men and women who are so desperately needed as teachers for the immediate future.

That's the first unanswered question: who should teach our youth and how important do we really think the teacher is? The second question is this: Whom should we teach? This question is much more profound than it appears. We Americans must reevaluate a decision which was arrived at about one hundred years ago, a decision to the effect that in a democracy it is desirable to assume that all young people are equally educable, that part of our democratic heritage is the right of all citizens to the same kind, the same level, the same intensity of education. If the Declaration of Independence, when it states that all men are created equal, implies that all men have equal capacity for intellectual, artistic, scientific, professional development, then, of course, we should continue to democratize and expand our educational systems indefinitely, to demand that we will never be satisfied until every American youth has the opportunity of a college or even a graduate degree regardless of his personal capacities. The fear that Americans will continue to answer this question by insisting that we educate everybody is creating nightmares for college and university presidents who are staggered by the mere anticipation of the burden in numbers that such an answer will place on American institutions in the next fifteen years.

Some of us are hoping that our experience of the last few decades would have clarified the answer to: whom shall we teach? Yes, we should try to teach all

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President, St. Louis University.

Presented at the Annual Banquet at the 96th Annual Session, April 6, 1954, St. Louis.

but not all alike because each one is different, each one is not equally gifted for advanced intellectual training, each has a right merely to have his own personal capacities developed to a point where he can live a dignified, satisfying useful life for himself, his family and his community. In attempting to teach all alike we have tended to neglect those with unusual ability; we have allowed them to go uninspired and unchallenged, to waste their potential because they were bored. Teaching for the average has resulted in the inevitable acceptance of dull drab mediocrity. Surely there is no disgrace in being average, but we should not forget that when you are average, you are as close to the bottom as to the top. And this posits that second question clearly before us. If, on the one hand, we insist on teaching all American youth but according to their individual abilities, then colleges and universities can do a more effective job of the work for which they are best qualified, and other equally honorable and better adapted institutions and curricula and courses can be provided for those who can profit most from nonacademic, noncollegiate types of training. But if, on the other hand, we insist on teaching all American youth alike intensively and extensively, the quality of our educational institutions will continue to deteriorate and we will be guilty of wasting and dissipating that commodity which cannot be bought—the best talents and brains in our American youth. Whom shall we teach?

The third question is: how shall we provide education for our young people? What systems, what institutions shall we set up to perform this task? I suppose most of you would answer that question by asking another: what's wrong with what we have? We have our far flung public elementary and secondary school systems; we have our great tax supported colleges and universities; we have schools at all levels under private or denominational auspices. I would agree most heartily with you that this is indeed an excellent arrangement. But the question is still pertinent. Are we sure we will be able to continue this excellent dual system which permits parents to exercise their rights in choosing the type of education they wish for their child, this dual system which prevents governmental control of education and the dangers of stagnation without competition. Are we sure we can continue when inflation has increased educational costs to a point where income from tuition in a private institution will not suffice to pay even one half of its total expenditures? Will not competition from industry and government and tax supported institutions in the form of higher faculty salaries and better teaching and research facilities force the private institutions in time into a position of inferiority and eventual ineffectiveness? The answer to that question, of course, will be determined by the willingness of our citizens as individuals, as alumni, as directors of businesses and corporations to give financial support to private education in such proportions that the tremendous advantages of tax subsidized schools will be at least substantially counterbalanced. But here again, this question of how we are to organize and maintain our educational systems is an extremely vital question which the American public must answer and answer very soon.

The fourth question or series of questions center on the word *what*—what are we going to teach our young people? Are we convinced that because knowledge has become so specialized, because so much time is demanded for adequate preparation in one's field of specialization, we must abandon the age old aim of first educating an individual to be a man, a human being, and only after that to be a doctor, a lawyer, engineer, businessman or artist? Never have we achieved such spectacular success in the training of specialists of a thousand varieties (and I am not in any way denying their importance) but must we do so at the fatal cost of developing hundreds of adults who can scarcely read and write intelligently, who do not know how to use their leisure time profitably, who have no interest in other human beings' activities, who feel no responsibility for human welfare outside their own little specialized circle? Unless we face this question squarely and do something about it in our schools everywhere, we will wake up some morning to find that we are not a unified nation of broadly educated citizens but a disunited conglomeration of tribes, each speaking its own specialized language and jargon, each totally out of contact with and unsympathetic toward the others.

Here is another phase of this same burning question: what should we teach our young people? Do we still think that heavy concentration in the study of the physical sciences will give us all the answers to the ills of modern civilization? Is the laboratory and the test tube the chief, maybe the only way to arrive at truth? There are some of us who are convinced that this has been one of our most tragic educational mistakes. We have forgotten that science, wonderful as it is, can only give us better, more effective means of doing and making things. Science can never tell us what the ends, purposes, objectives of our actions should be. One of the great educators of our day put it this way: "The problems and opportunities of our time arise out of man's relations to man rather than his relation to the physical world. Today our greatest need is to acquire more knowledge of man and the ways in which men learn to live together in peace in a complex, conflicting, ever-changing world." Educators with a true perspective plead with us to get our educational content back into a reasonable balance between literature and the humanities and the social sciences as well as the physical and biological sciences.

And this brings me to the final and third phase of this question which must be answered before it is too late—what are we going to teach? To put it quite simply, every school at every level of our educational ladder has a twofold task: to give our boys and girls technics and a tradition. As far as technics are concerned, we have done a magnificent job; no educational system in the world has imparted technical skills and "know how" as effectively and to as many students as have our American schools. But what about the second part of our task—the transmitting of our Judaic-Christian tradition, the handing on to young minds and hearts all the wisdom and values that have been accumulated over the centuries into what we normally call Western culture and civilization? We need not go back very far to absorb the essence of this tradition. It was obviously motivating our founding fathers when after full deliberation and thought they wrote: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by the Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." I submit that in these words is the plainest possible implication that these early great Americans believed in the existence of certain absolute truths, evident to every thinking man, which should be the guiding lights not only of our private lives but of our lives as citizens and social beings: the existence of a Supreme Being, the personal dignity of each individual man and woman; the origin of man's rights from God and not from the state; the existence of an eternal, immutable moral law which establishes right and wrong regardless of human whims. These principles cannot be set aside as the dogmatic teachings of some religious sect; these philosophical, ethical principles are so essential to our Western tradition that without them it becomes a hollow shell no matter how brilliant it may still seem on the surface.

There are those who are convinced that our American education is failing to transmit, whole and entire, our Judaic-Christian tradition to coming generations. If this concern is justified, it constitutes in my mind the worst possible indictment of our schools. Justified or not, it thrusts boldly before us that vitally important question: what should we teach?

Who should teach? Whom should we teach? What should we teach? These and a score of other related questions I have hurled at you in what may seem to have been a discourteous and confusing quiz program. As I discussed them, inevitably you have sensed what my own answer would be to these questions. But that is not my objective this evening. Rather I had hoped to arouse in you ladies and gentlemen, representing an intelligent, responsible, important segment of our citizenry the realization that these are questions not only in which you should be interested but which you as American citizens must answer. Fortunately or unfortunately, our American schools will be what our American citizens demand that they be. And, therefore, if you are interested in the welfare of your own children, in the welfare of your neighbor's children, and ultimately in the welfare of this country of ours, you must help all of us study these unanswered questions in American education, arrive at logical, incontrovertible answers, and then insist that these answers become the educational philosophy of our schools. The assumption of this task as a personal responsibility will be, I think, the most powerful single contribution which each of us can make toward our own peace and prosperity and for the security and freedom of future generations.

Service and Reward

M. PINSON NEAL, M.D., *Columbia*

There are moments in life when nothing seems real, neither past nor present, and this is such a moment. The invitation to be a participant on this significant occasion is one of the real compliments of my career—if indeed, claim can be made to a "career." It is impossible to express my gratitude and I assure you that in this group, I feel particularly humble.

March 17, Saint Patrick's Day, what a day to pay credit, honor and homage to such men! The only way in which either of them could have been improved would have been to be born in "Old Ireland."

This event recalls my first speaking appearance in Sedalia. The occasion was the Annual Meeting of our State Medical Association, the place—the court house, the year 1927. The late and much loved friends, Bill Breuer was president and Eddie Goodwin was secretary. I shall never forget that hot, stuffy room and my appearance at 1:00 p.m., following a five months illness—jittery and as scared as a March hare.

It is a genuine pleasure to see the acclaim and honor given these two grand colleagues for their fifty years of devoted service to their fellow man. In their early years how different it was combatting bloody flux, the strangler—diphtheria, typhoid fever, smallpox, childbed fever, summer diarrhea, scarlet fever and epidemic meningitis—diseases little known and feared today, and with no hospitals and no nurses to stand by and take part of the strain and tension from the doctor. Only such men as these, with their years of experience know of the days of long confining illness when the patient's chief occupation was counting fly specks on the ceiling or flies on his bedding. Contrast that please with today; the early ambulation of the woman who has given birth to a baby, the fractured legs and the postoperative patient. They are commonly up on the toilet seat the day of delivery or major operation—literally boosted out of bed—almost before the delivery or operating room has been prepared for another patient. Surely some must look upon us as almost back to the methods of savages.

Watching our disturbed friend, A. J. Campbell, looking longingly and waiting for the material award reminded me of the little girl, Bessie, who when asked by her mother, what song did you sing today in Sunday School, replied—"We sung, don't be skeered—you'll get your quilt." The song actually was—"Fear not, the comforter cometh."

Also in waiting through these procedures, I too developed an anxiety, wondering if I could measure up to my part. This brought back memories of an old friend, Mike, the superintendent of a log cutting crew. Mike was famous for his unlimited and colorful vocabulary. He could swear a blue streak without fear of repeating himself and was the envy and idol of every man in the woods. At least half a dozen times a day, when his displeasure was aroused, he would sound off until the air and woods would smoke and there developed a deep, satisfying purple. One day, when in competition with another crew for accuracy in felling trees, his crew let one fall across and block the railroad track. Mike stood staggered by the bad luck—visualizing the loss of a keg of beer, while his men waited breathlessly for the great explosion—the one magnificent outburst, the blistering reprimand. His face grew red, his bull-neck swelled with rage—he mumbled, he sputtered and finally with a gesture of utter despair, he said: "Fellows, I just ain't up to it."

The medical profession of fifty, yes, even thirty years ago was one with a purpose, with a soul and a heart. The purpose, the soul, the heart have not been taken out of it in 1954—but today they are not activated, I fear, by the same interests. With your permission I would like to bring some family history into this be-

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cause it is personal information. My father, in the eighties and nineties, as a general practitioner in Northern Alabama was known to everybody within miles. He was the friend, the advisor, and the one approached in any time of need. Many were the days and nights when I drove the team of horses while he slept, cramped in a buggy seat, and in cold weather with a hot rock or brick underfoot for warmth. There were no closed phaetons, coupes or sedans with heaters, defrosters or radios. It was always heart-warming on approaching a house where there was illness or "misery," to see a group of urchins lined up on a rail-fence and hear their yells—"Glory be, yonder come 'de doctor."

Among early memories of those days with my father, who in addition to practicing medicine, with a horse and saddle or buggy, deal with him also running a livery stable, a drug store, a hotel and owning farmlands. For pay, he accepted any thing but pickaninnies. Be you reminded there were no telephones—not even R.F.D. mail service. For a doctor to be called, or to get to him a progress report on a patient, some body had to come to the doctor or catch him passing near their home en route to a more distantly located patient —often thirty or more miles from his home and office.

Today the doctor is practically a stranger to those he serves. Do you ever think how rarely he sees his clientele—his patients, except in his office or in a hospital bed? What their problems are, he considers beyond him except those directly pertaining to an immediate illness, and then too often the patient is pushed off into some room to wait for a nurse, attendant or technician to do this, or that, on, or for him—grunt a couple of times, mumble a few uninformative remarks and say, "Come back next week—the same time and the doctor will see you." Is that the service we would want for ourselves?

For the practitioner, an humble student of medicine and of mankind, of the early part of this century, there were twenty-four hours in each day—he had time, or at least took time, to listen to the patient's and the family story. He usually knew of the feuds, fusses and fights and took that information into account. He was not concerned with noonday luncheon clubs, golf courses, automobile races, Wednesday and Saturday afternoons and Sundays off, and he was not pestered with the fund drives for every imaginable thing except a retirement fund for broken-down men of medicine. To him, service was his duty—and serve he did!

The senior members of this group realize that fifty or more years ago there were almost no laboratory diagnostic or x-ray facilities, no serologic tests, no biopsies, very few, indeed very, very few autopsies, no test for blood sugar, N.P.N., no electrocardiography, no cardiac catheterizations, no basal metabolic, renal or liver function tests, no lung or cardiac surgery, no 606 or similar therapy, no specific treatment for pernicious anemia, no preventive vaccine against typhoid fever, no sulfa drugs, penicillin, antibiotics, no blood banks, blood transfusions, blood derivatives like gamma globulin available to physician or patient. To come closer to the home, there was no modern preservation of foods, no family could brag of a deep freeze unit packed with foods and there were no automobiles in the garage—nor were there garages or filling stations. What has become of the many patients who were bedeviled with leeches and blisters when rest was in need? Think, if you please, of the "purifying—cleansing" dosages of calomel, castor oil and epsom salts, so familiar to all patients in our early days in medicine. Who uses these today, and one may rightfully ask what has become of the old "blood-letting" doctors?

Some one has made the plea—"O'Lord give us men —men equal in stature to our mountains." We do need more men of vision, integrity, initiative, purpose, stamina and energy—standard bearers. We all hold great pride in the accomplishments of colleagues, Campbell and Dyer, their past records, and we shall look forward to the future, *their future,* with courage and interest—knowing they are at the wheel helping to solve many problems and to bring to an end some of our unfinished business—for there is still work on the trestle-board, and I would call to your attention, the fact that the steam that blows the whistle, makes the noise, doesn't move the wheels.

In spite of all our progress, all improvements, and better facilities, medicine has suffered. The peculiar concentration of the present era on specialty board recognition, technics, doing undreamed of things—time out for recreation, the method of referral of patients from one man to another instead of getting down to work, have separated the individual physician further and further from contact with the patient. The binding link between the good physician, the family councillor, the supporting rock in time of need, has been relegated to a corner of the office, a receptionist, a technician, or thrown bodily out the door at great hurt and harm to the true aim of medicine. It is not always so much the thing one does but the way one does it. What would the egg amount to—if the hen got upon the perch or roost pole to give it birth?

Another thing that creates very bad public impression, is the idea that the doctor is so engrossed in recreation and in not raising his income tax to a higher bracket. One of my good friends dotes on square dancing. The story got out that he could not be reached for any purpose on Friday nights for these were reserved for his square dance club sessions. It is just as bad to have it said, "Doctor X can never be reached for anything on Wednesday and Saturday afternoons and Sundays for those are his periods for golf, fishing or hunting." These doctors should realize that illness and death take no holidays. Slowly and painfully, some are learning that they must do to others—what they would have them do to and for him. Can't each of you —won't each of you try to visualize a frantic young mother with a sick baby being told—"The doctor can't possibly see your child until April 5 at 2:00 p.m." Is that good public impression or relation, especially when that mother sees in a local paper that the particular doctor was occupied for three days that week in a golf tournament or entertaining a group of "visiting firemen?" How different to the cry of our fathers: *"Help me O'Lord, to seize every opportunity to relieve the suffering of others."*

We, who chose medicine should feel obligated to uphold that which must be the ideal of every physician—to be worthy to care for and heal the sick. It is disheartening to note man's inhumanity to man in any place—but it is particularly so where it affects the sick and the miserable.

Medical students, even the premedical students hopeful of being admitted to a medical school have a background built on visions of expensive automobiles, big bank accounts, stocks, bonds, trips around the world and such. These things stifle a true incentive and interest in realism that we associate with medical care and public service. The imagination of these young people is even shackled in high school and college where emphasis is on sports, pleasure, clubs and fraternities. Somewhere in this program of training, I insist, should come manners, morals, spirit, integrity, recognition of emotions and reward for intelligence and labor. When an individual says—"I have reached my goal," his interest and too often his usefulness are gone.

The "grass roots" as well as the "clouds" are and always have been parts of man's environment and universe. Without competition, man can never progress; the price of progress is competition and competition entails labor. We, to make progress, to achieve success, must work in the vineyard. There is no magic vitamin, no capsule of intelligence, no chemo-therapeutic or antibiotic agent or blood product which will serve in the place of the one medicine which brings excellence —*hard work*. Teddy Roosevelt stated "The first requisite of a good citizen in this republic of ours, is that he shall be able and *willing* to pull his own weight."

Man's urge to heal and comfort his neighbor is a basic human trait and the relief, the reward that comes from the sharing of pain and fear is almost universal.

Where modern preventive and curative medicine is applied and adequate food is available, the human life has more than doubled in the last 100 years. We as physicians must exert ourselves also as good citizens and worthy neighbors to see that the added years are made fuller, healthier, happier and occupied. What we can contribute as citizens through social responsibility is not little. Unless we with many others tackle this task soon, it may be too late—considering current hysteria, artistic lying, fear, hate, snobbery, intrigue and preparations for more destructive wars. One must view with some alarm the progressive disappearance of one of America's most precious natural resources—the native supply of plain old-fashioned common sense. What has happened to it in recent years?

It has long been known that a man, a woman, a child—or a dog for that matter, does best when he does his best at that which he likes to do best. The world has never worshiped or made a hero of a self-centered, selfish individual. One must lose himself in service and interest of others. You and I know too many men who accomplish about as much as bees buzzing around in an artificial flower shop, or as a sparrow hopping hopefully after wooden horses on a merry-go-round.

Those who would be successors to men of the caliber of Doctors Campbell and Dyer be advised that who would be leaders—first be the servant. Men and women of the entire universe, might well live by and bow to words voiced by Leonardo da Vinci, namely: "Thou, O'God dost sell unto us all good things at the price of labor."

Labor is not a gruelling ordeal performed under a whip, but a privilege, a privilege by which one earns one's living and enriches in some way, even though it be small, the lives of one's contemporaries and those of future generations. Labor will keep one healthy and young if you work with enjoyment. It is resistance to work, not work itself, that ages people—that kills. Thomas Huxley stated "The great end of life is not knowledge—but action."

Every Doctor of Medicine should regularly take stock of himself, or herself—ask and answer the following:

What were my reasons for entering the field of medicine?

Have I kept faith with myself in carrying out my mental and voiced promises?

Have I kept inviolate the Oath of Hippocrates?

Have I lost the perspective?

To lose perspective is to lose judgment. It would be a great surprise to know how many people, including doctors, who give little more than lip-service to the promises made to themselves and to others as to what they would do if given the chance for a professional education. Medical schools, hospitals and clinics must have doctors with a conscience to build tradition, thorough, complete, honest and courageous medical care for all peoples. Size and numbers are not the all important things.

"In service" to a Doctor of Medicine, applies to refresher courses, postgraduate study, medical society programs, hospital staff meetings, to keep abreast of developments—constantly seeking new truths for the benefit of whom? To be sure, those we serve, including self.

The spirit of service day in and day out, minute by minute dominates and directs the man in general practice. Medicine's entire business—every thing about it—exists so that service is available and can be rendered. The spirit that brings the most to the service, likewise, returns the most to those who give it. Opportunities for men and women of our calling are open, wide open, and they go far beyond the call for medical care.

Mark Twain in one of his serious moods, said: "Man starts in as a child and lives on diseases to the end as a regular diet. . . . He's just a basketful of pestilent corruption, provided for the support and entertainment of microbes. . . . Think of the lion, the tiger and the leopard, then think of man—that poor thing! The animal of the wig, the ear trumpet, the glass eye, the porcelain teeth, the wooden leg, the silver windpipe—a creature that is mended all over from top to bottom." Twain thus cast before all men a vision—a picture of the result of our service—and an evidence of reward—at least a living man.

The right to practice medicine is acquired as a living trust and power to be used for good—never for evil. One mark of a true physician is the eternal hunger for self improvement. Courage, bravery, love of truth, integrity and clarity of thought are vital to those who practice our profession. Life with all its pains and sorrows is still a precious gift, the most valuable possession of man. I believe it is our duty to strive for its prolongation, by rendering service without regard to personal ambition.

The great American public needs a more personal and diversified interest of Doctors of Medicine in affairs of our country, our communities, our civic projects, our schools and our churches. It is due and proper that the doctor be accepted as one capable and worthy of carrying partnership and responsibility of leadership in such affairs. Do we need more specialists—more board certified members? Indeed not, but men and women broadly trained and imbued with deep seated and driving ambition to serve; in short, more, and more and more family physicians, or general practitioners as they are dubbed today. The pursuit and acquisition of certification by a specialty board has put the "kiss of death," so far as the profession of medicine is concerned, upon more than one good prospective candidate for general practice.

Medicine is a partnership, a business between doctors, their ancillary coworkers, dentists, nurses, nurses aids, public health workers, technicians, dieticians, our patients, their families and, yes—our own families. It will be far better in the long run when medical education and educators establish a working partnership with practicing physicians.

REWARD

One of toil's rich rewards is that after working faithfully for eight hours a day and having no worry, then in time you may become the chief—the boss, so to speak, and work eighteen hours a day and have all the worry.

I have often wondered during these ripening years what the public would think if it knew of the many thousands of hours of thought, study, anxiety, toil and energy, and just plain sweat, that have been devoted annually by doctors of medicine to community problems and to the care of the non-paying customer and his family. Mr. and Mrs. American Citizen would be incredulous. These things have been the product of incentive as well as willingness, faith, hope, charity, unending energy and uncompromising understanding.

The adoration, the reverence, yes—the almost worship with which the general doctor was, and where existent today, is held, is reward far beyond that available to any other individual or groups of individuals and is a great tribute to men like A. J. Campbell, David P. Dyer, Pete Siegel, Milton B. Casebolt, Wm. J. Shaw, and others too numerous to list. Particularly, I would cite the late greatly beloved Abe Lincoln of the medican profession, Arthur E. Hertzler, who served as general consultant on many medical problems. The mere satisfaction of effort, and the comfort of a service well done is reward—makes one rich indeed. Even failure can be with pride and of great and cherished personal reward—if failure comes after you have tried —after you have given your best.

Surely Dickens was aware of the rewards that come from our successes and failures alike when in his great novel, "Bleak House," the heroine gives voice to the following—"I never walk out with my husband, but I hear the people bless him. I never go into a house of any degree, but I hear his praises, or see them in grateful eyes. I never lie down at night, but I know, that in the course of that day he has alleviated pain, and soothed some fellow creature in the time of need. I know that from the beds of those who were past recovery, thanks have often, often gone up, in the last hour, for his patient ministration. Is not this to be rich? The people even praise *Me* as the Doctor's wife."

To those tolerant, long suffering, patient and devoted families, who contribute so inestimably to our well being, our progress, our successes, our mental stability and our happiness, we can never give adequate recognition or thanks. In all reverence—I beg that God bless them.

To colleagues, A. J. Campbell and David P. Dyer—a prayer for you, and long may you be blessed with life and health. Long may we profit by your knowledge, wholesome council and sincere friendship. Your hours of rest should be more calm and peaceful because of the relief you have given others. "When you lie awake at night, listening to hail and rain, know you it falls more lightly where you eased ache, misery and pain. In many a home storms are less severe, the winter ice and snow less cold and the summer sun more bright because of the confidence, cheer, courage and comfort you took therein."

That personal, priceless possession—*memory*—should make all of your days full ones and your hours happy because of that which you have given the many. To those who would be your worthy followers—who would emulate you—who would seek and be worthy of like reward, I would have them weigh two facts: By service you made your living through the opportunities you got—and you made your life by and received reward from what you gave. To you, noble men and physicians, an accolade. No matter what game we play, you are the kind of men we would choose on our team.

Fifty Years of Medicine—and Service

ROLAND S. KIEFFER, M.D., *St. Louis*

TWENTY-FIVE YEARS AGO, I attended a dinner in this city during the annual meeting of the Missouri State Medical Society at which the Society honored one of its past presidents, the late Alonzo R. Kieffer, my father, on the occasion of his fiftieth year of practice. Tonight, fate has decreed that I again find myself in Sedalia, to participate with a group of doctors, in celebration of the quinquennial of another kinsman, my beloved cousin and respected colleague, Dr. David Patterson Dyer.

The population of the United States has doubled in the past fifty years. During that period, however, the number of persons living over sixty-five years has quadrupled, so that today about one person in twelve must be classed as elderly. It is obvious that this still increasing normal life expectancy with a concomitant increase in fixed age compulsory retirement plans among corporate employers will seriously affect the economy of our country at some future date. It has already created new horizons in the practice of medicine, as witnessed by the newest specialty—geriatrics. The causes of this are familiar to all of you—from the dramatically decreased infant mortality rates, the control of diabetes by insulin, to the conquest of pneumonia and other infectious diseases by the sulfonamides and antibiotics, to the spectacular advances in surgery made possible by a better understanding of fluid and electrolyte balance, blood replacement, improved anesthetic techniques and a variety of anesthetic agents. All of these changes have occurred in the professional lifetime of the jubilarian.

We sometimes ask ourselves if it is humanly possible that further significant progress in the prevention and cure of disease is possible, if we have not reached the peak in the advancement of practical medical techniques. The surgeon categorically states that the modern, ultraradical resection of the breast for malignant disease

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cannot be further broadened in its scope, confronted as it is, by the impenetrable barriers of intrathoracic pathways of metastasis. Adequate margins in other surgical fields are unobtainable in many instances, yet who of us could possibly have imagined the incredible goals that have been achieved in the twentieth century in every field of medical endeavor. Historically, I should like to remind you that more than seventy-five years ago a determined effort was made to abolish the United States Patent Office on the grounds that everything that could be invented had already been patented. I recall hearing in 1932 at the American College of Surgeons the late Dr. Milliken, the renowned physicist, say that in his undergraduate days he was advised by his scientist friends to forsake the study of physics, a static science, not worthy of his great talents.

Surgery evolved slowly from the days of the ancient Greeks and through the Middle Ages. The impassable barriers were the control of hemorrhage, the abolition of pain and the prevention of infection. Ambroise Pare, in the 16th century, made practical application of the ligature for bleeding vessels. Previously hemostasis was effected by the application of the red hot iron, boiling oil, or some other superheated agent. Anesthesia, if any, was produced by alcohol or opiates. Morton's first general anesthetic by ether at Massachusetts General Hospital in October, 1846, opened new vistas in surgery, though any significant advance was still impeded by the almost inevitable infection that followed a surgical operation. Sir Joseph Lister's monumental contribution toward the control of infection met with such widespread opposition, that, incredible as it seems to us today, he was grossly rebuffed by the surgical greats, on his visit to this country *within the lifetime of your two celebrants* here tonight. It remained for Robert Koch, by his classical studies on the bacillus tuberculosis to open wide the gates for the era of asepsis and the beginning of the golden or Halsteadian era of surgery at the turn of the century.

The surgeon of the early twentieth century was, as were his predecessors, essentially an anatomist. All of the outstanding surgeons of this period arrived at the full flower of the practice of their art through arduous apprenticeships in the anatomical laboratory. The surgery of today rests on a much broader base and during the past twenty-five years, has developed along physiologic, endocrinologic and biochemical concepts. Within the past seventy-five years, the brutal, heroic surgery of necessity has been completely replaced by the gentle, meticulous and unhurried technics of today. No longer is a surgical operation a desperate last resort effort to save a life, undertaken only when all other treatment has been unavailing, but now more often an elective procedure often sought by the patient, not necessarily to save his life, but to prolong it and make him more comfortable.

The advances in the field of medicine have likewise been swift and spectacular. The prevention of infant diarrhea, and the improvement in infant feeding have contributed predominantly to our greatly increased normal life expectancy. Diets rich in vitamins and minerals through adolescence are producing a race of potential giants, as witnessed by the average weights of college football teams, the disappearance of the wasp-waisted, corseted, cloistered glamor girl of the Gay Nineties, and the physical educational programs for both sexes in our elementary and secondary schools and in our colleges and universities. The contribution made by insulin, the sulfonamides and antibiotics are familiar to all of you, but, perhaps, not so fully appreciated as by those of us who, as interns saw wards overcrowded with cases of lobar pneumonia for whom we could offer only fresh air, digitalis and prayer. The old familiar cases of typhoid fever, malaria, diphtheria and other protean diseases, are now, by their conspicuous absence, mute testimony to the progress of preventive medicine. Many years ago Virchow described coronary occlusion as observed on the autopsy table, but not until the middle 1920s were these findings correlated by Musser with the familiar clinical entity of coronary heart disease, and many of us here tonight might blush with the recollection of the deaths by "acute indigestion" which we have certified. All this, and more, within the lifetime of a doctor who is still actively engaged in the practice of medicine and completely undaunted by the new wonders still to be seen as time goes on.

During the past fifty years the change in medical education in this country has been as dramatic as the advances in the medical sciences. During the period of a 100 per cent increase in population, the annual number of graduates in medicine has increased but little. On the contrary, the number of medical schools has decreased approximately 50 per cent. This has been caused by several factors such as the increasing cost of operation due to expanding requirements in the basic science years, and the rating of medical schools by the Flexner Commission beginning in 1910, which resulted in the disappearance, by the time of World War I of the proprietary medical school. Today, of the seventy-two medical schools and seven basic science schools, forty-one are departments of privately owned universities, thirty-five are state owned, and three municipally owned.

When Pat Dyer began the study of medicine, a small minority of the medical schools in this country required more than a high school diploma for admission. In 1912, when Washington University first required two years of premedical college credits, only five men were admitted to the freshman class, most of the other schools in this area, requiring less, siphoning off the majority of candidates. Contrast this with the year 1949, when all medical schools required a minimum of from three to four years of premedical college credits for admission, there were in this country a total of 24,400 applicants of whom less than a third, 7,000, were accepted. Since this, there has been a spectacular change—in 1953, the number of applicants dropped to 14,600, of whom more than half, or 7,700, were accepted. It has been suggested that this is due to the fact that there are presently available to college graduates a wealth of high paying non-professional jobs, and also the high cost of medical education.

Academically, the medical schools of the United States seem to have divided themselves into two groups with respect to policy or purpose. Despite frequent, public avowals of their dedication to the policy of educating doctors to enter general practice, there are a limited number who are obviously primarily concerned with the education of doctors who contemplate research or teaching after graduation. Despite such sources there appears to be a serious threat of shortage of specifically trained teaching personnel, particularly in the preclinical or basic science years. I wonder how many of us realize that the full time professor in the clinical years is a comparatively recent development in medical education. Dr. Evarts Graham, on accepting the chair as Bixby Professor at Washington University in 1919, became the second full time Professor of Surgery in America—preceded only by Halstead.

When Dr. Campbell and Dr. Dyer graduated from medical school, only a small part of their classmates served an internship. Those who did, served an internship, for the most part in a hospital whose closed staff was composed of, or supervised by a medical school faculty. The number of graduates at that time was greatly in excess of the number of available internships. Only after World War I has the private hospital internship been a factor in graduate training. Since 1930, the number of approved internships has been greater than the number of graduates and the disparity has steadily increased. Today's intern has definitely a buyer's market—in 1953, 5,543 graduates, and 9,370 approved internships!

The "pyramidal" resident training of my day has given way to the modern program of progressive resident training with specifically predetermined, increasing professional responsibility with each year of training. This, in turn, has provided better training for more men so that the senior resident on completion of his service is fully equipped in every facet of his specialty to take his place as a junior member of the visiting staff team. Since World War II, the private hospital has more and more entered the picture in resident training, and as our experience grows, increasingly satisfactory teaching programs, accredited by the specialty boards, are being developed.

All this does not imply that the doctor of yesteryear must necessarily have become a more poorly qualified practitioner than his junior colleague of today. It does mean that graduate training today has been made available to more doctors, and that such training is better organized and coordinated, and more specifically designed to qualify a general practitioner or a specialist for his entrance into the practice of his chosen field. In many ways, too, it is easier, because, picked up by the conveyor belt of such a well-oiled training program, he does not have to depend entirely on his own initiative to know what may be good or bad for him, as all of these things have been carefully predetermined for him by the Joint Committee on Accreditation. There is much to be said for the value of the old preceptorship type of training, but, on the whole, no one can dispute the superior opportunity afforded the man who trains under visiting men of varying personalities and qualifications, thus giving the trainee a cross section of the thinking of a number of staff men with the resulting stimulation of their divergence of viewpoint. On completion of his training, at whatever level, experience acquired only in practice, is just as essential today, to acquire the wisdom and judgment to make a doctor a competent and successful practitioner.

Tonight's honorees have seen all these changes first hand, and can intrigue you for hours in telling you of their experiences in the earlier days of their practice—when there was no such thing as a blood count, no blood chemistry, no x-ray examination, no instrument even for determining the blood pressure of a patient—and other comparatively simple aids for making a diagnosis, considered commonplace and even indispensable today. Their armamentarium for the treatment of patients was just as restricted. There were no intravenous solutions, no blood transfusions, no oxygen inhalations, no continuous gastric suction tubes, no insulin, no vitamins, no sulfonamides or antibiotics, nor many more of the agents in daily use today by doctors in every village and medical center in this broad land. There were no continuous gratuitous seminars in pharmacology and therapeutics as afforded today by the ubiquitous detail man. There was no short cut, quick and easy, cocksure and positive presentation of the latest advances in medicine as offered today by the clipped, curt sentences of *Time* magazine, and the confident, romanticized medical contributions of the *Readers Digest*. These doctors *had* to get it from a medical journal! This does not mean that they are not as familiar with the advantages of these procedures as more recent graduates, but indicates that they have lived in such a swiftly changing era that their knowledge of these things has been acquired the hard way. They have had to be aggressively alert and fundamentally studious to keep abreast and to practice the modern medicine that they do.

The county medical society was the local clearing house for the interchange of medical experience of the doctors in any community. Today the hospitals have largely replaced the medical society in this function by the requirement of compulsory attendance at staff meetings, clinico-pathologic conferences, seminars and departmental meetings, to the number of thirty or more each year. This has been, I believe, a good thing for the doctors and for the hospital. It has been a bad thing for the local medical society in my community. Required attendance at so many meetings at one or more hospitals take up so much time that the average doctor neglects to attend his local medical society meetings. The multiplicity of societies, special, regional, national and otherwise, is a far cry from the good old days when the practitioner looked forward to his annual hegira to his state society and American Medical Association meeting. The constantly increasing volume of medical literature, good, bad and indifferent, has imposed further demands on the doctor's time. Never before, has the necessity for at least a cursory glance at current medical literature been so great to enable the practitioner to keep pace with the swift advances in medical science.

Conditions unrelated to the science of medicine are producing profound changes in the art of medicine as practiced by every private physician today. Just as the businessman today is no longer freely enterprising, his business conducted, as it is, along restrictive lines dictated by government and by labor unions, so, too, is the doctor beginning to realize more and more that the rugged individualism characterizing the medical profession, and which, more than any other factor has accounted for the extraordinary progress in twentieth century medicine, is being seriously threatened by present day ideologies. More than half of our medical schools are departments of privately owned universities. Such universities owe their existence and growth to endowment by philanthrophy. Increasing costs of operation and the rapid decrease in philanthropic contributions due to confiscatory taxation foretell the day when subsidy will be necessary. Such subsidy can come from only one source—government. Such control could easily change the whole picture of education as we have known it.

Time will not permit me to comment but briefly on socialized medicine. On April 22, 1930, my father said in a meeting of the St. Louis Medical Society, "We not only strive to benefit the health of individuals who call upon us to treat them, but *we are constantly interested in so-called state medicine, benefiting the whole human family.*" Health insurance programs are a sign of the times. More than half of the population of the United

States are protected by some form of voluntary health insurance, and the number is constantly increasing. The threat of compulsory government controlled health insurance is still imminent, despite the political demise of C. Oscar Ewing and his sponsor, genial Harry, of "give 'em hell" fame. Part of the blame for this state of affairs rests squarely on the shoulders of our profession. First, organized medicine was not sufficiently alert to the trend of the times, and the need for a program of health insurance. When it was belatedly cognizant of what was going on, its pronouncements, whether intentional or not, were predominantly destructive, not constructive, and produced a lot of poor public relations. In the second place, individual doctors, during the war years of lushly remunerative practice, have too often lost sight of the humanitarian obligations imposed on them, and by their reluctance or flat refusal to make house calls, even in the daytime, and by their propensity to charge all the traffic would bear, created a spirit of resentment among the public. These people feel strongly but mistakenly that state medicine would correct these abuses. The high cost of medical care today is not predominantly due to high doctors' fees, but more to the high cost of drugs and hospital services.

Over specialism in medicine, often complained of by the very patients who seek specialist consultation on their own initiative, and just as often when it is not necessary or even desirable, is not new. Herodotus, in his "Account of Egypt," written nearly five hundred years B. C., said of the Egyptians, "The art of medicine among them, is distributed thus: each physician is a physician of one disease and of no more; and the whole country is full of physicians, for some profess themselves to be physicians of the eyes, others of the head, others of the teeth, others of the affections of the stomach, and others of the more obscure ailments." You and I know that specialism today is more necessary than ever, as a result of the vastly increased total aggregates of medical knowledge, and skills, making it physically impossible for any one man to properly qualify himself to be a medical "all things to all men." You and I know that by far the majority of human ailments can be best treated by the general practitioner. You and I know that whatever over-emphasis on specialty practice there may be has been the result of public demand and the failure of the public to appreciate the value of the services of the hard working competent general practitioner, their failure to respect his right to rest and recreation, and the failure to accord him proper prestige and adequate remuneration. The trend today, happily, is increasingly toward general practice as any dean of a medical school can tell you. The Academy of General Practice is a potent factor in organized medicine of today. The average income of the general practitioner is higher than the average income of the specialist. Truly, virtue hath its own reward.

History repeats itself—in medicine. The homeopaths, the eclectics and the medical cults of fifty years ago have dissolved into the great body of medical practitioners. You are witnessing today, the phenomenon of other healing cults, who, as they grow older, deliberately or otherwise, lose sight of their primordial cultist heritage and imperceptibly, but inexorably, engage in the practice of all those therapeutic technics they so ardently assailed in their early days. So-called osteopathy today, is patently, as my father stated in 1903, "a back door to the practice of medicine." Some of you here today will see the day when they enter the practice of medicine through the front door.

I have talked about the past in medicine. The future of medicine is in the hands of you younger men, and the burdens carried through the years by your colleagues of the older generation will be carried by you. If you would profit by the mistakes of the past, you must, in applying yourselves to the future, resolve to not repeat those mistakes. Yours is a heritage of unselfish devotion to the highest ideals of the most altruistic occupational group in the country. If you would preserve that heritage, you, too, must be altruistic, unselfish, studious and dedicated in practicing an art "in the most marvelous and complex medium in the world—the human body." If you would safeguard the right to practice medicine, untrammeled by fiat and decree by lay political officials, you must take an active interest in the affairs of your medical societies, local, state and American. One third of the 210,000 doctors in the United States do not belong to the American Medical Association. Can you imagine, in this day, any other occupational group, so threatened by regimentation, so oblivious of the value of the strength achieved by unity?

Of What Trade Are You?

JAMES R. AMOS, M.D., *Jefferson City*

The Division of Occupational Health of the Public Health Service has recently published the results of a pilot study on occupational disease reporting. The study, covering a period of two years during which eleven states, including Missouri, submitted copies of all reports of occupational diseases, was undertaken to determine facts, rather than find faults.

The results of the study are not encouraging. An examination of the data emphasizes the fact that occupational diseases are not reported, regardless of the reporting system in use in the several states. The report makes no recommendations, but does present the following problems for solution:

"In conclusion, it is evident that circumstances surrounding occupational disease reporting and statistics in this country are complex and involved, but they can conceivably be remedied. Some of the difficulties which contribute to poor reporting of occupational diseases and to inadequate statistical knowledge of the occupational disease problem may be summarized as follows:

"1. Need for a standard categorical classification of occupational diseases which would form a foundation for codes for statistical purposes. A minimum of the major categories would be helpful.

Director, Missouri Division of Health.
From Industrial Hygiene Service, Bureau of Public Health Engineering.

"2. Need for the development of standard criteria for determining reportable occupational diseases and for differentiating them from traumatic injuries, which would increase the reliability of statistics on those conditions.

"3. Need for the development of standard statistical methods for presenting occupational disease statistics, especially a specific classification code for diagnosis and cause, which would contribute to the comparability of existing data now being tabulated by the different state agencies. The diagnosis code should be based on the World Health Organization International Statistical Classification of Diseases, Injuries and Causes of Death insofar as it is practicable for occupational diseases; the cause code should consider the American Recommended Practice for Compiling Industrial Accident Causes of the American Standards Association.

"In addition to these technical difficulties, problems broader in scope and application require group attention and action:

"1. Recommendation of a standard generally acceptable definition of an occupational disease.

"2. Reevaluation of the practices of reporting of occupational diseases in the light of past experience and modern needs.

"3. Assistance to physicians in general practice to better acquaint them with diseases of occupation and the circumstances giving rise to them.

"4. Improvement of the quality of reports of all types.

"5. Possible establishment of a national reporting system for occupational diseases."

The value of reliable statistics for occupational diseases is obvious. The development and application of control measures for communicable diseases, such as malaria, typhoid, diphtheria, small pox and many others, would certainly have been delayed had it not been for morbidity data which emphasized the necessity for such measures. Similarly, the appeals for donations to finance research on heart disease, cancer or infantile paralysis, would not be receiving nation wide public acceptance without statistics proving the necessity for such research. It is without question that the present lack of data on the prevalence of occupational diseases in Missouri seriously handicaps planning and directing a program for improving industrial health.

The Missouri Public Health Manual, "Control of Communicable and Other Diseases Dangerous to Public Health," which became effective July, 1952, establishes regulations for the reporting of diseases. Regulation 3, which lists reportable diseases, is divided into Group 1, Communicable Diseases; and Group 2, Occupational Diseases.

The present list of reportable occupational diseases is a radical departure from the list effective prior to the publication of the current Manual. In general, the list parallels the headings published in the Sixth Edition (1948), Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death. The decision to follow this classification was made after receiving the advice and approval of the Industrial Health Committee of the Missouri State Medical Association.

An examination of the list, which is reproduced below, reveals that it is general rather than specific. The necessity for adopting broad terminology is predicated on the complexity of occupational diseases, as well as the fact that the materials or agents that may be a major cause of occupational disease may not be known today. An example of the latter is the rapid development of the use of insecticides, particularly the highly toxic organic phosphates, and the accompanying development of new methods of application, such as distribution from the airplane. It is apparent that the adoption of a list of specific occupational diseases would rapidly become outdated.

GROUP 2. OCCUPATIONAL DISEASES

Air Pressure, High and Low
Cold, Excessive
Conjunctivitis and Ophthalmia, Occupational
Dermatitis, Occupational
Heat, Excessive
Neoplasm, Malignant, Occupational
Pneumoconiosis, Occupational, Due to Silica and Silicates
Pneumoconiosis and Pulmonary Fibrosis of Other Occupational Origin
Poisoning by:
    Alcohol
    Arsenic and Antimony, and Their Compounds
    Carbon Monoxide Gas
    Corrosive Aromatics, Acids, and Caustic Alkalis
    Cyanide Gas
    Fluorides
    Industrial Solvents
    Lead and Its Compounds
    Mercury and Its Compounds
    Petroleum Products
    Other Gases and Vapors
    Other Solid and Liquid Substances
    Radiation

The responsibility for reporting occupational diseases is not confined to the physician with an industrial practice. The industrial physician, whether full-time, part-time, or on-call, is more likely to be cognizant of the possibility of an occupational cause for an illness, particularly if the patient is an employee of the retaining company and if the physician has recognized his responsibility to the employer and employee to the extent of becoming familiar with the various operations and materials used by the industry. That physician will understand that the patient diagnosed as having aplastic anemia may be performing a task resulting in exposure to benzene fumes. The private practitioner ordinarily will not consider such a possibility.

For this reason, the title "Of What Trade Are You?" was selected. The asking of this question as a routine part of the examination of the patient was proposed some 250 years ago by an Italian physician named Ramazzini. This physician and teacher recognized that there could be more than a casual relationship between occupation and health. The complexities of modern industrial processes have increased rather than decreased the importance of this relationship.

There are many factors accounting for the current lack of reported occupational diseases. These have been summarized in the Public Health Service Report, as follows:

". . . Among these are difficulties of recognizing and diagnosing occupational diseases, the lack of standardization and shortcomings in the laws themselves, and nonenforcement of laws. Resistance by physicians or any professional group to a compulsory reporting system is recognized as a factor. Physicians are loath to make reports because of their limited knowledge of occupational diseases, of industry itself and of materials handled and manufacturing processes involved. Moreover, it is probable that many physicians are of the opinion that reporting occupational diseases violates the confidence of the physician-patient-employer relationship. The claim that compulsory reporting will never be successful unless it is associated with reasons other than that of collecting statistics would therefore appear to have some merit. In this country, such an incentive is implied in the administration of workmen's compensation laws."

Difficulties of recognizing and diagnosing occupational diseases is unquestionably a major factor. Industrial management has become aware of the value of the healthy employee and, almost without exception, provides control equipment to prevent excessive exposure to toxic materials. Consequently, the acute occupational disease case with the classical textbook symptoms is rarely, if ever, seen by the physician. The occupational diseases encountered today are most likely to be the result of a relatively long exposure to low concentrations, characterized by indefinite symptoms that can be associated with a multitude of both occupational and nonoccupational diseases. Without an accurate diagnosis and a recognition of the industrial origin of the disease, an unending cycle of medical treatment, return to work and exposure; medical treatment, and return to work, ad infinitum, may be established.

The basic philosophy of "prevention rather than cure" applies to the operations of the Division of Health in the field of occupational diseases, as well as communicable diseases. There is, however, a greater importance attached to the cure of occupational diseases, since "cure" should include the elimination of the toxic material, which will result in "prevention." At the present time, the industrial hygiene program depends on a systematic search of industries and requests made by individuals or organizations to locate exposures to toxic materials. A search is time-consuming and inefficient. The requests currently received call our attention to only a part of the problem. Occupational disease reports could, and should, constitute the initial source of information regarding exposure to occupational hazards. Please report occupational diseases to your Division of Health.

Oasis?

All in all, the medical profession is resented because of high fees, no night calls, no house calls, and cold, impersonal relationships with patients. The medical profession opposes social change which a large segment of the public has been led to believe would miraculously solve all medical care problems. They blame us for shrugging it away as "socialized medicine."

How do we stand locally? We believe, with good reason and until proven otherwise, that Greene County is in an exceptionally healthy state in this regard. Surveys made of other areas show our fees moderate. The doctors work together so that indigents receive care as good as that of our richest citizen and often in the same office. In the matter of night calls and house calls there are occasional mutterings but we do not claim to be any more perfect than those who surround us and we have yet to find a single example of neglect.

Nonetheless, the fight is ours. Whether we are under individual attack or not our profession most certainly is. What to do about it?—W. E. Wooldridge, M.D., Editorial, *Greene County Medical Bulletin.*

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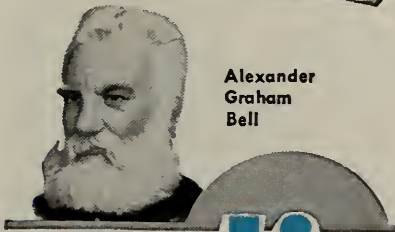

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Prescription for Anemia

Jesse D. Rising, M.D.

Spring is the traditional time for blood-building tonics, but in modern practice it is always open season for the hawkers of hematinics. One can only guess how many individuals are taking "blood-builders," but their number must be legion. Certainly a great many persons are wasting money on medicines that are not indicated, and a large number of them are doing so on doctor's orders. In these "broad spectrum" days, the physician is tempted to treat every anemic patient with a double-barrelled shotgun preparation. These are not only expensive, but often constitute less than optimum treatment for the specific patient. Even more important, their use leads to sloppy diagnosis, and they actually fail to help a large group of anemias for which they are commonly employed.

It may be argued that the general practitioner does not have the facilities for doing complete blood studies, and that, even if he did, the patients could not tolerate the expense of such procedures. This is not true for no physician is so isolated that he cannot establish a tentative diagnosis which will be a serviceable guide to treatment. A simple red cell count and hemoglobin determination will almost always indicate what therapeutic measures are likely to succeed, and what further diagnostic work is indicated.

From the red count and hemoglobin the color index can be calculated with ease. The normal color index is between 0.85 and 1.15. If it is below 0.85 the patient has a hypochromic or iron deficiency anemia which can be expected to respond to iron therapy. One is, of course, obligated to explain the iron deficiency. In growing youngsters it may be dietary, but in adults it is most often the result of chronic blood loss. If the patient truly has an iron deficiency anemia he will respond significantly within a month or six weeks to almost any iron preparation. Ferrous salts are best because they do not depend on hydrochloric acid for proper absorption. The dose need not be high. The usual three to five gain tablet actually furnishes an excess of iron; higher doses do not increase iron utilization proportionately, but tend to disturb the stomach and bowel.

If the color index is normal (0.85 to 1.15) the patient has a normochromic anemia and will not respond to any amount of iron, or to any other hematinic for that matter. Such patients may either have depression of the bone marrow (commonly caused by chronic nephritis, an endocrine disease or a poison), or invasion of the bone marrow by malignant tissue (leukemia, multiple myeloma or metastases). Normochromic anemia can only be treated by attacking the cause; neither iron nor liver is at all helpful.

Hyperchromic anemias (color index over 1.15) may, for practical purposes, be divided into true pernicious anemia (associated with achlorhydria) and all other types, such as sprue, hyperchromic anemia of pregnancy, and nutritional hyperchromic anemia.

In cases of true pernicious anemia there is an absence of intrinsic factor, a mysterious substance that facilitates the absorption of vitamin B_{12} which is essential to normal erythrocyte maturation. Only one or two micrograms a day of vitamin B_{12} are required for normal blood formation, but even much larger oral doses are not adequately absorbed by pernicious anemia patients. For this reason such patients preferably receive B_{12} by injection. If oral administration must be used the B_{12} should be combined with an intrinsic factor preparation such as stomach concentrate. Liver injection may also be used, as it is a good source of B_{12}, but it is slightly more expensive, causes more pain at the site of injection and may be allergenic. Iron is not needed. Other hyperchromic anemias are best treated with folic acid injections. (For a more complete discussion see Rx: Common Sense, "Liver and B_{12}" Missouri Medicine, p. 886, November 1953.)

A few of the common hematinics are listed below. Many of them contain multiple vitamins or numerous trace minerals or both, none of which has any real value in the treatment of anemia. They all contain iron and liver or B_{12} and some also contain folic acid. For a comparison of price plain iron, liver and vitamin B_{12} are shown. The prices given are the approximate cost to the patient of treatment for a month, and are estimated on the basis of the manufacturer's suggested dosage.

OFFICIAL MEDICATIONS

Ferrous sulfate	$1.75
Ferrous gluconate	1.75
Vitamin B_{12} (100 mcg. injection by physician)	3.00
Liver concentrate (injection by physician)	3.00

PROPRIETARY HEMATINICS

Beminal With Iron & Liver	$ 3.60
Bepron Fortified	14.40
Beta Concemin Fortified	13.50
Cebetinic	6.60
Cofron	18.00
Feosol Plus	4.95
Fergon Plus*	13.50
Ferrated Liver Concentrate	9.90
Ibrin	12.00
Iberol*	8.10
Lextron, F.G.*	12.40
Perihemin*	7.20
Redicyte*	8.50
Rubraferate	10.80
Ventrex*	14.50
Zymafolic Capsules	22.50

* Contain stomach concentrate (intrinsic factor).

These preparations are "shotgun" medication in every sense of the word, but in spite of this, they do not afford even minimal effective treatment for pernicious anemia unless they contain either liver or vitamin B_{12} combined with stomach concentrate (intrinsic factor). The preparations containing this combination are indicated by an asterisk after their names; none of the others should ever be used to treat pernicious anemia patients.

A word of warning: preparations containing folic acid are potentially dangerous because they will usually improve the blood picture in pernicious anemia, but they do nothing to prevent neurologic complications. Patients will seemingly be doing well only to suffer neurologic degeneration without warning.

SUMMARY

1. Anemia is a symptom, not a disease, and the cause of the symptom must be discovered and corrected.

2. Any doctor can, by doing a red count and a hemoglobin determination, tell what type of symptomatic therapy an anemic patient is likely to need, and the probable cause of anemia.

3. Symptomatic treatment of normochromic anemia is whole blood transfusion, and even this is not satisfactory.

4. Patients with hypochromic anemia usually respond nicely to modest doses of ferrous iron. They do not need fancy medicines combining iron with trace minerals, vitamins, liver, B_{12} or folic acid.

5. Vitamin B_{12} by injection is the drug of choice for a true pernicious anemia. If oral preparations are used they must be combined with stomach concentrate (intrinsic factor). Liver may be used, but folic acid is contraindicated.

6. Other hyperchromic anemias are best treated by folic acid. They respond only incompletely to B_{12} or refined liver.

Medical Journal "From the Sticks"

. . . Two years ago this Journal was originated as a minor local project simply for the purpose of providing an incentive and an organ for an adventure into organized medical thought and writing to a small society who by its rural location was denied any "brush" with the forensic angle of the profession. There was no illusion ever of our becoming a medical mouthpiece of national acceptance—there was no timidity either for the ability and the talent was here—there had simply never been an opportunity, or an incentive for developing it.

. . . Only twenty-two men were approached to get the twenty major essays that have appeared, and many of them would do credit to a journal of national scope. Seldom has anyone refused to put into publishable form an interesting case—a medical oddity.

. . . We are probably not responsible for the delivery of a single new medical truth, but through the Journal we have become aware of what goes on here . . . things about our confreres that weren't obvious before . . . developed a pride in our local organization and what . . . we can do. Our society prospers, our Hospital staffs play to capacity houses. Thirty five members are not many but they can make one hell of a noise if they scream at the same time.—Editorial, *Cape Girardeau Medical Journal.*

A Rent-Payer?

. . . stop treatment when you stop doing good. When you stop doing good, you are not coasting; you are doing harm. Perpetual treatment is the outstanding abuse of physical medicine. Patients and their families often conspire with the irresolute physician to perpetuate treatment. The patient does so to avoid or postpone the reality of permanent disability, to punish a spouse with worry and bills, or to save face in a doubtful illness. The family does so to salve guilt feelings toward the patient. The physician is tempted to do so to spar for time when the diagnosis is unknown or to indulge demand for false psychotherapy. Let us hope that he never considers continuing treatment merely to meet his overhead.—Sedgwick Mead, M.D., St. Louis, "Responsibilities and Privileges of the Physiatrist," *Southern Medical Journal.*

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Every man owes a part of his time and his money to the profession in which he is engaged.—Theodore Roosevelt.

Among Ourselves

(Editorially Speaking)

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"It's Deductible, Doctor"

When a person buys a house, he is bombarded with suggestions as to methods which are purported to make the home (whether abuilding or secondhand) become a paradise of comfort, "a thing of beauty forever," and all this at an unbelievably low cost. He is told that such-and-such roofing will cut down on the heat bills "almost 10 per cent"; storm sash will "save perhaps" another 10 per cent; insulation will undoubtedly save an "estimated" 25 per cent. Actually, to believe the various salesmen, somebody else will be paying heat bills!

An analogous situation exists concerning physicians and those who beseige us to make contributions for the multitudinous "deductible" activities. Physicians apparently are the No. 1 target on everyone's sucker-list, especially if they are selling oil-well propositions, gold mines or other specia of the glib salesmen. Also, physicians must lead the list on these other deductions, "charities," many of which have real merit, deserve support and bestow a glow on the donor.

And yet, if a fellow donates to every gimcrack which comes along, he is bound to find the law of diminishing returns rearing its ugly head somewhere along the line. It is something like physicians griping about the number of medical meetings they must attend, then starting a new society with still more numerous meetings.

Just where is anyone to draw the line? We know one physician, not too religious, who contributes a substantial sum each year to his Church and its parish activities. Probably 75 per cent of his annual "deductible" contributions (which reach well up into four figures) is thus allocated. Another colleague is lop-sided in his contributions to the various youth organizations, which certainly are deserving.

We have no quarrel with the *modus operandi* of these charitable, quasi-charitable, or pseudo-charitable solicitors of funds. But, after reading where, in some instances, 90 per cent of the dough has gone to the folks who beat the bushes, and only 10 per cent has remained for those it was intended, we wonder if other physicians aren't in about the same boat. Aren't others a little more than slightly irritated at this repetitious, threadbare supplication, "It's deductible, Doctor"?

Vincent T. Williams, M.D.

Smoking Problem

A few years ago the proponents of state medicine came out with an astounding statistical statement to the effect that in our draft for World War II, 5,500,000 men were rejected. This they said was a sad indictment of our present form of medical practice. The figures at first glance were staggering. However, when the number rejected because of illiteracy, feeble-mindedness, insanity, congenital deformities was deducted a surprisingly fine showing resulted that was a great credit to organized medicine. And remember, if a man with a hernia were called up a number of times—he would be counted as just so many rejectees. Then finally such cases with operable herniae were inducted, operated and in due time put into service. The final figures were never corrected for these multiple inclusions, yet, nevertheless, they indicated an unprecedented extremely high level of medical practice.

Now if this original figure (5,500,000 rejected) had been taken at face value what a tremendous and distorted picture would have resulted. Today, we are given some (at first glance) astounding figures as to tobacco smoking being the cause of lung cancer. The organized medical profession and, indeed, the individual doctors should not condemn or lend their influence to condemnation of smoking as the cause of lung cancer until the statistics have been fairly and honestly processed. Already other factors are showing up—city smokers have a greater incidence of lung cancer than do comparable smokers not living or working in city areas. Material extracted from city air will produce, when repeatedly applied, cancer on a rabbit's ear. The tremendous increase on our streets in the use of gasoline—the increased use of petroleum combusion in industry, may be found to be a factor not yet properly taken into account.

Certainly, after our would-be indictment (relative to rejectees in the draft) based on snap acceptance of gross statistics, we should be fair minded before doing serious injury to a major industry with its many ramifications.

Of course, this is beside the point as regards the effect of nicotine on the heart, peptic ulcer and vascular disease—opinions as to these effects have become stabilized.

If after the statistics on lung cancer have been processed, there is still undisputed evidence of a significant carcinogenic effect from smoking, we owe it to the public and ourselves to speak the truth. But let's be certain before we do a lot of economic harm to a lot of innocent people. We want to stand stable, firm, intelligent and just among our fellow Americans.

F. T. H'Doubler, M.D.

The A.M.A. and the Pony Express

The progress of world news dissemination from the early days of the Greek marathon runner to modern television has been one in which speed has been the paramount objective. In fact, so fast has world news transmission become that "Today's news today" on many occasions gives way to "Tomorrow's news today." Statesmen and politicians answer challenges and criticism immediately. Nations hurl back answers and make new threats while the ether waves are still hot. To use the Pony Express method of reply in any instance would certainly prove worthless and ineffectual. Yet this is the method used by American Medicine and the A.M.A. today.

The critics of medicine blast their way on radio and television daily. Their false accusations and inferences thunder over the ether waves and fall on the ears of attentive listeners. Confusion in the minds of the laity regarding their family physicians in the first instance quickly give way to a verdict of guilt when no answers are forthcoming. The answers, to be sure, will come. But when? They will arrive by the Pony Express method through periodicals and medical journals when they are cold and where the laity will not even see them.

Are we so poor, so dumb, so naive as to let these accusations remain unchallenged and, in the final analysis, plead guilty by our failure to answer them before the public? News commentators of labor, industry and religion present daily news broadcasts in their sponsors' favor. Why not an A.M.A. news broadcast daily or possibly weekly on a national hook-up presented by a name commentator giving our side of the news with on-the-spot answers to our critics?

Martyn Schattyn, M.D.

Anaphylactic Death Following Repository Penicillin

Today new drugs, useful in many diseases, are available. However, these new drugs themselves may cause or aggravate pathologic processes. All physicians are familiar with penicillinosis, the hives and arthritis of serum sickness following a penicillin injection. But another complication, death, following penicillin must be emphasized repeatedly.

As far back as 1865, it was noted that penicillium spores could cause disease when Blackley precipitated an asthmatic attack by having a patient inhale penicillium glaucum spores.[4] With the introduction of penicillin, there have been many untoward reactions. Since 1944, the literature has reported frequent occurrences of urticaria and arthritis.[1, 3, 5, 9] At first, it was thought impurities were the causative factors.

Later, other reactions became apparent. Scaffer noted a Herxheimer reaction due to penicillin in a female with syphilitic pachymeningitis.[8] Moragues noted a fatal hemoglobinic nephrosis. He believed the penicillin precipitated an immunohemolytic reaction with the hemoglobin later precipitating in the kidneys.[6] Rabinovitch noted a fatal exfoliative dermatitis following penicillin.[7] These reactions fortunately are infrequent.

However, anaphylactic shock with or without death following penicillin occurs considerably more often. Waldbott reported the first case in 1949.[10] Many since have been recorded. In 1953, anaphylaxis and death frequently complicated the use of penicillin designed to concentrate in the lungs.[2]

Another preparation of penicillin designed to obtain a high blood level for a prolonged interval has been seen to precipitate death following injection.

A 52 year old, obese, white steam-fitter was examined on October 1, 1949, for cough, dyspnea, nasal obstructions and post-nasal drainage, reoccurring every fall and winter for eight years. Nasal polyps had been removed twice. His father had nasal "catarrh," and a brother had suffered from eczema. Examination revealed obesity, swollen, pale nasal membranes, regular pulse at 88, blood sugar were within normal limits. Intradermal tests showed positive reactions to house dust, wool, dog hair, feathers, horse serum, phyrethrum, bacteria, egg, milk and the spores of several fungi,

(Continued on page 500)

Fraternally Yours

"Money . . . or Brains?"

We were privileged recently to relax with a colleague we nominated for medicine's "Man of the Year," except he wouldn't want his name mentioned; he's that kind of a guy!

After better-than-average postgraduate training, he settled in a Missouri town of about 1,000. He was trained by a surgeon who ran his own hospital, who also excelled in teaching fundamentals, such as anatomy and pathology. With this background (truly an anachronism in these days, but still the best method of training a young surgeon), he is today the chief factotum in his own bailiwick, which includes a small, thoroughly modern hospital, serving a rather populous trade area. We were completely charmed and flabbergasted by this man's dedication to his patients and profession, by his selflessness as he detailed plans and dreams—more so after all the eyewash we have heard concerning community hospital needs, costs of hospital beds, the difficulty of obtaining trained personnel, ad nauseam. His conversation was as refreshing as a breath of fresh air.

Let's take the matter of cost-per-bed in hospital construction. He stated they had just made a substantial addition to their hospital beds, which also involved expanded operating room, delivery room, diet kitchen, orthopedic and x-ray facilities (the expensive "guts" of any hospital), including air-conditioning—all this at an average cost of five thousand dollars per bed!

"How in the world were you ever able to do this?" he was asked. "Well, when we first went to the architects, the builders, and the other guys who were supposed to help us, they shook their heads. 'It can't be done,' they told us, 'for less than fifteen or twenty thousand dollars a bed.'

"So, we took the problems home with us at nights, because after long conversations, we saw what the architects, contractors and builders had in mind—they had visions of a big city hospital, with lots of beautiful, modernistic glass, stainless steel, marble. All we wanted was a good place to take sick people and cure them, without all of the Hollywood effects which some patients seem to demand now-a-days."

"Our patients get along just as well with personalized treatment, without so much glamour, even if we don't have much money to spend on gadgets and trinkets. Sometimes it's better not to have so much money . . . then we have to use our brains."

* * *

Industrial Health in Missouri

When Missouri became the sixteenth state of the Union, in 1821, her industrial rank was low, compared to the older and more populous eastern centers. Today, Missouri occupies the 13th spot, insofar as industrial products are concerned. While this is not intentionally a Chamber of Commerce blurb, it is gratifying that our state has changed from the corn-mules-cotton-tobacco economy of a half century ago.

However, with this expanded industrial economy, arises a challenge and obligation to the medical profession. Have we adequately provided decent industrial medical care for the large army of industrial workers in Missouri? Most physicians believe the bulk of industrial workers are employed in the "great big plants"; they do not visualize the true situation: That the majority of American industrial workers is constituted by men working in plants of under five hundred employees!

For several years, this writer has had an intimate acquaintance with our industrial health program in Missouri; it is spotty! Some larger industries have full-time physicians with unquestionable ability, these get good service. Much more numerous are those smaller industrial situations wherein the medical service may be classified as only fair-to-rotten. In some areas, practitioners not even medical doctors, care for the industrial population.

The present speciality of being a good, first-class, top-drawer, industrial physician, contrasted to the old-time "first-aider" in industry, is as different as the horse-and-buggy days of transportation compared to the modern Cadillac.

Anyone who attended the 1954 Industrial Health Conference in Chicago, April 24-30, must realize that caring for industrial health has now far transcended the old days of administering emergency care out of a cigar box containing tincture of iodine, a roll of cotton and sometimes adhesive tape! The practitioner of industrial medicine today is no longer that pot-bellied failure with dirty fingernails, with gravy and tobacco juice all over his expansive vest. He no longer depends on political pull, on dollars and cents "kick-backs" to get and keep his job. Today, a top-flight industrial physician commonly has badges and ribbons from high-falutin' speciality boards and organizations; in many instances medical universities have a department of industrial medicine, and their faculty is liberally sprinkled with members on a part-time or consultation basis.

It's about time we physicians wake up in Missouri; let's "pull Missouri out of the mud" in industrial medicine, as we have done in so many other admirable ways . . . to keep Missouri medicine abreast of, or ahead of, the times!

V. T. W.

Missouri Medical Meetings

School Health Education Workshop, at Central Missouri State College, Warrensburg, July 6-8, 1954.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.
Kansas City Southwest Clinical Society Conference, Municipal Auditorium, Kansas City, October 4-7, 1954.
Missouri Academy of General Practice, Governor Hotel, Jefferson City, October 27, 28, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p. m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p. m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p. m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

At the recent meeting of the State Medical Association the House of Delegates agreed that school health should become an active, continuous consideration of the Association. It acted favorably upon a Council approved recommendation from the Committee on Infant Care. This recommendation, in brief, suggested that the Association concern itself, to a greater extent, with state-wide school health problems; that this charge be directed to a proper committee, preferably the Committee on Infant Care; that the Committee on Infant Care, if so charged, be expanded to ten members and renamed the Committee on Infant and Child Care. The House of Delegates voted a change in the Association by-laws to activate this forward looking proposal.

The health services and programs of the elementary and secondary schools throughout this state, for the most part, vary substantially in effectiveness, as well as in scope. In some schools physical examinations of pupils are given little attention, if any. In other systems periodic examinations are required of all pupils either by the family physician or by other sources arranged through the school. The health records of children, as they go from grade to grade, exhibit a great variation from school to school in the completeness of recording.

It is interesting to note the various ways high school athletic teams are professionally serviced, particularly during actual game contests.

What everyday health screening in schools can teachers perform? Should each teacher be trained in first aid technic? What principles for emergency medical services should be established for each school and who should help determine these? Where should family physicians fit into the school health picture? These are but a few of the questions being asked today in relation to an expanding awareness of the values to be derived from a sound school health program.

On July 6, 7, 8, 1954, will be held the Second Annual Health Education Workshop at the State College at Warrensburg, Missouri. This workshop is jointly sponsored by the college and the Missouri Division of Health. The program planning committee is composed of persons representing various organizations and agencies over the state which are justifiably concerned with school health services and programs. **John J.**

(Continued on page 500)

Members in the News

Preliminary survey work has begun for the Jefferson Memorial Hospital. It is hoped that the pledge goal of $350,000 will be exceeded before construction is started.

The St. Louis University School of Medicine is featured on the cover of the *Phi Beta Pi Quarterly* in the current issue.

William F. Kuhn, II, M.D., has opened offices in Kansas City for the practice of occupational medicine and surgery.

The Oklahoma State Medical Association at their May meeting heard MoMedics **H. Relton McCarroll,** M.D., St. Louis, and **E. H. Parsons,** M.D., St. Louis, speak.

Joplin city physician **C. C. Coates,** M.D., has resigned "for reasons of ill health."

Preliminary construction has started on the Lockwood Memorial Hospital.

Dr. **Paul L. Barone,** superintendent of State Hospital No. 3, has announced the appointment of two new staff members. From the Illinois State Penitentiary Psychiatric Division, Dr. Sylvester Doggett, and from Rochester, N. Y., Dr. Lawrence E. McCaffrey, are the new physicians at the Nevada hospital.

John Blumenschein, M.D., Independence, has been honored with a life membership in the Independence Optimists Club. Dr. Blumenschein is the fourth man so honored.

Kansas City Research Hospital Board of Directors has announced that construction on their new medical center is expected to be started late this year.

The Miami County Medical Society in Paola, Kansas, heard **A. W. Robinson,** M.D., Kansas City, speak on "Hyperparathyroidism and Related Bone Diseases."

The Kansas City Society of X-ray Technicians heard Dr. **Kenneth Hollweg** speak on "The Technician and Patient Relationship."

Kansas City Health Director **Hugh L. Dwyer,** M.D., discussed the polio vaccine campaign before the East Business and Professional Association.

The acting chief of the medical service at Kansas City General Hospital for two days late in April was **W. A. Sodeman,** M.D., Columbia. Dr. Sodeman participated in ward rounds, clinics, lectures and conferences during the two days.

John P. Frick, M.D., and his family were injured in a car wreck near Las Cruces, New Mexico.

Opening rounds of the Jackson County Medical golf tournament were held in Kansas City late in April.

New Franklin physician **G. L. Chamberlain,** M.D., has moved his office to the Alex Van Ravenswaay clinic in Boonville.

Plans for construction of a third floor on the Phelps County Hospital are awaiting confirmation from Washington. The proposed addition would double the bed capacity of the hospital.

Construction on the Noll Memorial Hospital in Bethany is expected to start this spring.

Poplar Bluff native **Robert L. Ward,** M.D., will begin the practice of medicine in Centralia on completion of his internship at St. Luke's hospital, St. Louis, this summer.

The Anatomy and Physiology group at the University of Kansas, Lawrence, heard **Ralph S. Casford,** M.D., Kansas City, speak on "Some Manifestations of Coronary Artery Imititators."

The new book "Children for the Childless" edited by Morris Fishbein, includes a chapter on adoption coauthored by **Fred B. Kyger,** M.D., Kansas City.

Spokesman for the Excelsior Springs school board in a recent shakeup is **George Sanders,** M.D., president of the school board.

Kansas City ambulances quit carrying interns on emergency calls after an intern, Dr. Tom Cochran, suffered a head injury in an accident in March.

Several Kansas City orthopedists participated in the first meeting of the new Midwest Orthopedic Society at the University of Kansas Medical Center.

The March issue of the *Journal of the International College of Surgeons* carries an article previously mentioned in MISSOURI MEDICINE, by **Garrett Pipkin,** M.D., Kansas City. The article refers to the first recorded instance of a free tendon graft in a race horse. At the

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1. Thorn, G. W., *et al., New England J. Med.* **248**:632, April 9, 1953.

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time of printing, the horse described had won ten and placed in one of thirteen races.

The Connecticut State Medical Society heard two MoMedics speak at their annual meeting in late April. **Hugh E. Stephenson, Jr.,** M.D., of Columbia, spoke on "Resuscitation of the Acutely Arrested Heart" and **Henry A. Schroeder,** M.D., St. Louis, spoke on "The Medical Management of Hypertension."

Missouri Baptist's Administrator C. E. Copeland was installed as president of the American Protestant Hospital Association. Mr. Copeland is also serving as president of the St. Louis Hospital Council and has served as president of the Southwide Baptist Hospital Association and the Missouri Hospital Association.

Albert Estes, M.D., Cape Girardeau, has attended a course in cardiology at Emory University.

James Kinder, M.D., of the same city recently attended a postgraduate course in pediatrics at Bethesda Naval Hospital.

The spring meeting of the Missouri Health Council was held recently in Jefferson City. Speakers at the meeting included Howard Brower of the A.M.A., Mrs. Paul Palmer of Ethlyn, B. M. A. vice-president H. C. Pogue, Mutual Benefit actuary Dilledward Howland, Blue Cross-Blue Shield director F. K. Helsby, Group Hospital Service of St. Louis Director John R. Kelly, and Missouri Medical Service office manager Rosella Schmeding. The group heard Parke M. Banta, general counsel Department of H. E. W. discuss "The Administration's Health Program."

Gerald L. Miller, M.D., Kansas City, was a guest speaker at the Postgraduate Assembly of the College of Medicine at the University of Nebraska in Omaha.

The first vice president of the Rotary Club of Kansas City, to be installed early in June, is **Lawrence P. Engel,** M.D.

John, son of **J. Loren Washburn,** M.D., Versailles, is the recipient of The God and Country Boy Scout award.

Two MoMedics have announced their intention of taking service internships. From St. Louis University Donald E. Beckman and from Washington University Robert Rubin, will intern at Brooke General Hospital. Both are from St. Louis.

A Pediatric Institute, considering various aspects of pediatric disease and nursing problems, was held late in May for Kansas City nurses. The Institute, held at Children's Mercy Hospital, was also host to nurses from the surrounding area.

Staff members at Kansas City Menorah Medical Center heard Dr. Rachmeil Levine of Chicago speak on "The Mode of Action of Cortisone on Inflammation."

By virtue of a special act of the Senate, Kansas City Dr. Alexander Moruzi has been granted permanent residence in the United States. Dr. Moruzi is assistant surgeon for the Missouri Pacific Hospital Association.

The Kansas City Planned Parenthood Association honored **C. C. Conover,** M.D., at a dinner meeting "in recognition of the encouragement he has given to further the program of the Association."

Over 150 business leaders and educators attended a luncheon in Kansas City where they heard Colby M. Chester, honorary chairman of General Foods Corp., discuss the financial crisis of the nation's medical schools. Sponsors of the meeting included **Larry Engel,** M.D., of Kansas City. Other speakers at the luncheon were Cornell Medical Center director Dr. Joseph Hinsey, Dr. **Roscoe L. Pullen,** and Dr. Franklin Murphy of Kansas University.

At Rockford, Illinois, **Carroll P. Hungate,** M.D., Kansas City, spoke on "Medical, Social and Economic Aspects of Civil Defense."

New officers of the Missouri Society of Anesthesiologists elected in April are: president, **W. W. Tillman, Jr.,** M.D., Springfield; president-elect **Seymour Brown,** M.D., St. Louis; vice-president **Joan Goebel,** M.D., St. Louis; secretary-treasurer **Russel Shelden,** M.D., Kansas City; and delegates **Oral B. Crawford,** M.D., Springfield, and **Jean Merz,** M.D., St. Louis.

The St. Louis Medical Society has begun the presentation of a new TV program "Your Doctor Speaks" over KSTM-TV, Channel 36.

Missouri State Board examinations were held at St. Louis University May 27 and 28, and will be held at Washington University on June 7 and 8.

Members of the St. Louis County Medical Society held their annual spring Dinner Dance at Belvedere Joe's on May 26.

The St. Louis County Medical Society Golf Tournament was held at Crystal Lake Country Club late in May.

... something Blue

IN the wedding plans, a family membership card in Blue Cross and Blue Shield may well be the **something blue** that's so traditional . . . a practical tradition, too, because there is a 9-month waiting period for maternity benefits after the change to family contract.

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BLUE CROSS
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Saint Louis
Kansas City

Petitions requesting a special election on a proposal to levy a city hospital tax in North Kansas City are being circulated.

At Hayti, **S. B. Beecher,** M.D., head of the Pemiscot-Dunklin public health departments, started the first of the series of Salk polio vaccine tests in that area. The other areas in the state taking part in the tests are Clay, Boone and Jackson counties and the city of Kansas City.

Construction has begun on the forty-bed addition to Kansas City St. Vincent's hospital. The work is expected to be completed within three months, giving Kansas City its first nonsegregated hospital.

Kansas City physician **Carroll P. Hungate,** M.D., participated in a panel on "Disaster Planning" in Washington, D. C.

At the first Clay County Health Forum held in Liberty, **Florence E. MacInnis,** M.D., spoke on "Tuberculosis Control" and **Terry E. Lilly, Jr.,** M.D., spoke on "The Basic Principles of Cancer Control." Both physicians are from Kansas City.

The American College of Radiology Board of Chancellors reelected **Ira H. Lockwood,** M.D., Kansas City, as Chairman.

Ralph E. Duncan, M.D., Kansas City, was elected president-elect of the Missouri Public Health Association at the close of its annual three day meeting in St. Joseph, May 6, 7, 8. He will take over as president at the Association's annual meeting in May of 1955.

A meeting of the Dallas-Fort Worth, Kansas City, Oklahoma City and St. Louis Gynecological Societies was held in St. Louis, April 24. This session was arranged through the auspices of the St. Louis Gynecological Society and presented a full day and evening program. The banquet speaker was Mr. George L. Shultz, St. Louis artist, who spoke on "Man Cannot Live on Bread Alone."

Seven members of the class of 1895 of the Missouri Medical College held a reunion in St. Louis on May 5. Those attending were **R. E. Schlueter,** M.D., **Robert J. Terry,** M.D., **A. T. Quinn,** M.D., St. Louis; **C. G. C. Ahlbrandt,** M.D., Kirkwood; **John Zahorsky,** M.D., Steelville; N. T. Enloe, M.D., Chico, Calif., and E. P. Staff, M.D., Ramsey, Ill.

In Memoriam

Tincher, Joseph C., M.D., Boonville, a graduate of St. Louis University School of Medicine, 1926; member of the Cooper County Medical Society; aged 55; died March 10.

Schaefer, Charles L., M.D., Kansas City, a graduate of Creighton University School of Medicine, 1937; member of the Jackson County Medical Society; aged 46; died March 12.

Smit, William M., M.D., St. Louis, a graduate of Chicago College of Medicine and Surgery, 1914; honor member of the St. Louis Medical Society; aged 73; died March 14.

Gottlieb, Leo, M.D., St. Louis, a graduate of Washington University School of Medicine, 1932; member of the St. Louis Medical Society; aged 47; died March 19.

Beatie, W. R., M.D., Springfield, a graduate of Marion-Sims College of Medicine, 1892; honor member of the Greene County Medical Society; aged 88; died March 26.

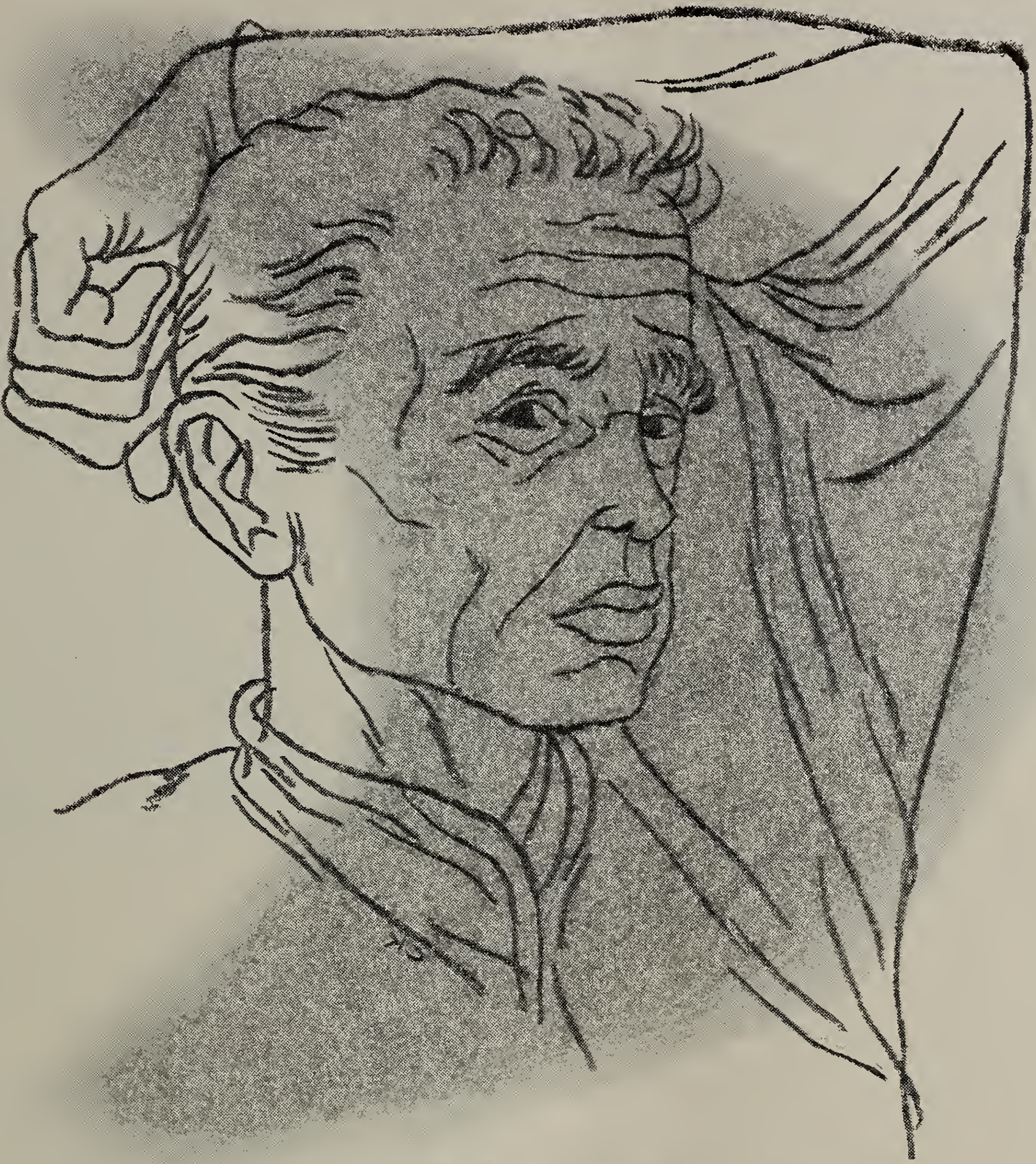
Bradford, Oscar F., M.D., Columbia, a graduate of Washington University School of Medicine, 1915; member of the Boone County Medical Society; aged 64; died March 29.

Wilbur, Clifford H., M.D., Polo, a graduate of Kansas University Medical School, 1923; member of the Grand River Medical Society; aged 63; died March 31.

Watson, Benjamin F., M.D., Independence, a graduate of the Kansas City Medical College, 1895; honor member of the Jackson County Medical Society; aged 84; died April 23.

New Members

Bare, Edward F., M.D., Tarkio
Bass, B. J., M.D., Salem
Cochran, Jo R., M.D., Cape Girardeau
Comens, Ruth C., M. D., St. Louis
Davault, George K., M.D., Richmond
Dunshee, Robert E., M.D., Maryville
Elias, David J., M.D., Kansas City
Field, Charles A., M.D., Cole Camp
Kasten, Melvin C., M.D., University City
Kleckner, James F., M.D., St. Louis
Levitt, Joseph, M.D., St. Louis
Mathes, Sydney B., M.D., St. Louis
Ozar, Milton B., M.D., Kansas City, Kansas
Perry, William D., M.D., St. Louis
Proctor, Donald C., M.D., Sedalia
Roberts, Lacy M., M.D., Kansas City
Rosecan, Marvin, M.D., St. Louis
Rugh, Walter B., M.D., St. Charles
Schaffer, Richard C., M.D., Kansas City
Shrout, Cecil B., M.D., Nevada
Stewart, G. T., M.D., Mountain View
Weisman, Renate D., M.D., St. Louis
Wheat, Myron W., Jr., M.D., St. Louis
Wright, George W., M.D., Webb City



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[1] Gurdjian, E. S., and Webster, J. E., Amer. J. of Surgery, 63:236, 1944.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

St. Joseph Clinical Society

Some seventy-five doctors from northwestern Missouri and northeastern Kansas attended the Annual Spring Conference of the St. Joseph Clinical Society at the Robidoux Hotel, St. Joseph, April 22. The Conference got under way with a luncheon at 12:30 p.m. Dr. **Allen I. Herman**, St. Joseph, President of the Society, opened the session with a few words of welcome. Dr. **John S. Kirk**, St. Joseph, Vice-President, monitored the afternoon program which presented the following:

A banquet was included in the program.

Fred J. Fricke, M.D., Department of Physical Medicine, VA Hospital, Omaha, Nebraska, "Current Principles in the Management of Arthritis."

Arthur P. Klotz, M.D., Department of Medicine, VA Hospital, Kansas City, "Management of Gastrointestinal Disorders Commonly Seen in Office Practice."

An interlude between speakers.

Hugh E. Stephenson, Jr., M.D., Assistant Professor of Surgery, University of Missouri Medical School, Columbia, "Cardiac Arrest."

Jack Hill, M.D., Department of Pathology and Oncology, University of Kansas School of Medicine, Kansas City, Kansas, "Cancer Detection Tests."

The afternoon and evening sessions were pleasantly separated by an enjoyable social hour which preceded the dinner. The social hour and dinner festivities were graced by the presence of many of the doctors wives.

The final presentation on the program was a discussion on "Radioactive Isotopes" by Elmer L. Degowen, M.D., Professor of Internal Medicine, Iowa University Medical School.

The Officers of the Society are: **Allen I. Herman,** M.D., St. Joseph, President; **John S. Kirk,** M.D., St. Joseph, Vice-President; **William B. O'Connor,** M.D., St. Joseph, Secretary-Treasurer.

Speakers Stephenson and Hill continue discussion.

Donald M. Dowell, M.D., *Councilor*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph Counties Medical Society

Justin Cordonnier, M.D., Professor of Urology, Washington University Medical School, St. Louis, spoke at the April 8 meeting of the Chariton-Macon-Monroe-Randolph Counties Medical Society at Moberly. He discussed "Nephrolithiasis."

W. D. Chute, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain County Medical Society was held in the Audrain County Hospital on Monday night, April 19. Members of the Callaway and Montgomery County Medical societies were also invited to the meeting.

The program was given by Dr. **R. Emmet Kelly,** and Dr. **D. B. Flavan,** St. Louis. Both of these doctors are on the faculty of St. Louis University Medical School. They discussed "Newer Drugs in the Management of

Hypertension." This program was furnished under the auspices of the Missouri Academy of General Practice and St. Louis University Medical School.

KATHRYN C. EPPLE, M.D., *Secretary*

Fall and Winter Postgraduate Meetings at Columbia

The five postgraduate medical meetings held September 24, November 19, 1953, January 28, February 25 and March 25, 1954, at the Medical School of the University of Missouri drew a total attendance of 280. County Medical Society members within a radius of fifty miles of Columbia received programs and regular notifications of these sessions. These five meetings were jointly arranged and sponsored by the Missouri Academy of General Practice and the Medical School of Missouri University. They were held on the nights previously indicated and occupied a period of two or more hours each of the nights. Physicians attending, who are members of the Missouri Academy of General Practice are entitled to formal postgraduate credit pertaining to Academy membership requirements. A total credit of ten hours may be taken for attendance at the five sessions of two hours per session.

An attentive audience listened to program on March 25.

Dr. Sodeman addressed the group.

The speakers who appeared on the various programs were: **William A. Sodeman**, M.D., Professor of Medicine, University of Missouri; **William J. Stewart**, M.D., Associate Professor of Orthopedic Surgery, University of Missouri; **Roscoe L. Pullen**, M.D., Professor of Medicine and Dean of the Medical School, University of Missouri; **William B. See**, M.D., Assistant Professor of Obstetrics, University of Missouri; **Henry Schwarz, II**, M.D., **John Tinsley**, M.D., and **Richard E. Johnson**, M.D., of the Ellis Fischel State Cancer Hospital; **Dallas K. Meyer**, Ph.D., Associate Professor of Physiology, University of Missouri; **Hugh E. Stephenson, Jr.**, M.D., Assistant Professor of Surgery, University of Missouri; Elwyn L. Cady, Attorney at Law, Lecturer in Law-Medicine Relations, University of Kansas City School of Law, Kansas City, Missouri. **E. Royse Bohrer**, M.D., Jefferson City, a member of the Missouri Academy of General Practice and Secretary of the State Medical Association, presided at the sessions.

Informal discussions followed the programs.

A similar series of meetings for the fall and winter of 1954-1955 is now in the planning stage.

J. LOREN WASHBURN, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society was held at Nevada on Thursday night, April 8.

Fourteen doctors were present and were well repaid by being privileged to hear a most practical talk on "Antibiotics" given by Dr. **Jesse D. Rising**, Kansas City.

O. B. BARGER, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, MISSOURI

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

A dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society was held in Rolla, on Thursday night, April 22. The members of adjacent county medical societies were also invited and a number attended this meeting. In addition many doctor's wives were present.

The scientific program for the evening was furnished by the Missouri Academy of General Practice in cooperation with the Medical School of the University of Missouri and presented **Roscoe L. Pullen**, M.D., Professor of Medicine and Dean of the Medical School, University of Missouri, who spoke on "The Pneumonias," and **William A. Sodeman,** M.D., Professor of Medicine, University of Missouri Medical School who discussed "Antibiotics." This program was unusually well received. In addition, those present were appreciative of the opportunity to get better acquainted with Dr. Pullen and Dr. Sodeman.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

Stanley F. Hampton, M.D., Assistant Professor of Clinical Medicine, Washington University Medical School, St. Louis, gave the scientific program at a meeting of the Mineral Area County Medical Society at the State Hospital, Farmington, Thursday night, April 29. He spoke on "The Management of the Severe Asthmatic Patient."

Members of the Perry and Jefferson County Medical societies were also invited to this meeting.

Dr. Hampton was sponsored by the Missouri Academy of General Practice in appearing on this program.

Jack Mullen, M.D., *Secretary*

Book Review

Hospital Care of the Newborn

The American Academy of Pediatrics has just published a revised manual entitled "Standards and Recommendations of Hospital Care of the Newborn." The purpose of this manual is to improve the general care of full-term and premature infants in the nursery and thereby lower the mortality and morbidity. It has the general endorsement of the following cooperative organizations: the American Academy of Obstetrics and Gynecology, the American Committee on Maternal Welfare, the Section on Maternal and Child Health of the American Public Health Association, the American Hospital Association, the National League for Nursing, and others.

Pediatricians, obstetricians and general practitioners involved in nursery care are urged to acquaint themselves with the manual and especially to see that their nurseries are not failing in adequate care. Many nurseries will have difficulty following some of the suggestions, such as floor-space requirements and nursery personnel, but many other ideas can be easily followed by any nursery. For example, many nurseries even in the larger cities are still found to have boric acid solution on their shelves which has been proven to be a very toxic substance to babies and should be discarded from the hospital. "Brecht feeders, which force food into the baby's mouth are dangerous and should never be used. Gavage feeding should be given only by a nurse who is trained and experienced in its use."

Although not discussed in the manual, this might be an opportune place to remind doctors of the highly suggestive evidence that too much and too prolonged use of oxygen in the premature may result in retrolental fibroplasia and blindness. It has been suggested that oxygen be used only as necessary (cyanosis, gruntiness, etc.) and not as a routine procedure day after day until a certain weight is reached.

"In this manual those things which are standards have been printed in bold face type and must be fulfilled by every hospital, large or small, rich or poor, that cares for newborn infants. None of these is idealistic unrealistic. All are essential to the protection of the infant. They cannot be compromised."

One of these statements in bold face type declares; "The infant should be supported or held in a semi-reclining position during each feeding period, and if fed by bottle, the bottle must always be held and never propped. Infants in oxygen should be fed in the incubator. No bottle feeding should exceed 20 minutes." If a nursery is to be a good nursery, these things must be followed. If a hospital claims lack of help they must get more help. Bottle propping of the newborn is a very precarious method of feeding.

This manual may be purchased for $1.50 from the American Academy of Pediatrics, 610 Church Street, Evanston, Illinois, and everyone involved in nursery care is urged to read it.

Roy F. Garrison, M.D.,
State Chairman of Missouri
Committee on Fetus & Newborn,
American Academy of Pediatrics

SESSION ON LEGAL MEDICINE AT SAN FRANCISCO MEETING

In recognition of the growing importance of the many situations in which medicine may contribute to a clarification of medicolegal issues and of the interest and concern of physicians in such situations, there will be presented at the San Francisco meeting in June a session on Legal Medicine in the Section on Miscellaneous Topics of the Scientific Assembly. This session will be held under the immediate sponsorship and direction of the Committee on Medicolegal Problems which has arranged an informative program to include discussions on topics of practical value to practitioners who, whether they like it or not, will some day become personally concerned in a medicolegal involvement.

The following papers will be presented: "Advice to the Medical Witness," W. I. Gilbert, Esq., President, Los Angeles Bar Association; "Malpractice, An Occupational Hazard," Louis J. Regan, M.D.; "Medicolegal Problems Related to Sterilization, Artificial Insemination and Abortion," J. W. Holloway, Jr., Esq., and Edwin Holman, Esq.; "Prevention of Transfusion Accidents," Alexander S. Wiener, M.D.; "Legal Aspects of Medical Partnerships," George E. Hall, Esq., and "Trauma, Stress and Coronary Thrombosis," Alan R. Moritz, M.D.

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WHEN SYMPTOMS ARE DISTRESSING BUT DISGUISED . . .

"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

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News From the Medical Schools

UNIVERSITY OF MISSOURI

Faculty: Recent appointments to the Faculty: Lieutenant John H. Killough, on duty with the U. S. Navy in Cairo, Egypt, as Assistant Professor of Medicine, effective about October 1, 1954; Captain John Logue, with the U. S. Air Force, Washington, D. C., as teaching fellow in Medicine about May 1, 1954; and promotion of Dr. Robert L. Russell from Assistant Instructor to Instructor in Pharmacology, effective July 1, 1954.

Alumni: At the Annual Meeting of the U. of M. Medical Alumni Association on April 7, in St. Louis, it was voted to coordinate activities with the central Alumni Division of the University of Missouri. Dr. Franklin Wakefield, Kansas City, was elected President succeeding Dr. Martyn Schattyn. Other officers chosen were Dr. M. D. Overholser, Columbia, Secretary-Treasurer; Dr. Kenneth Glover, Mount Vernon, Alumni Delegate. Mr. Powell B. McHaney, President of the University Board of Curators, outlined the progress of the Medical School. Dr. Roscoe L. Pullen, Dean, School of Medicine, gave an illustrated talk concerning the architectural developments and progress of the building now under construction. He disclosed that the School of Medicine had received nearly $112,000 in grants from private individuals, foundations and the federal government during the current fiscal year.

Staff: Miss Virginia H. Harrison, Director, Department of Nursing Education, has been awarded a travel grant by the Rockefeller Foundation.

Mr. Paul Peterson, prominent attorney in Columbia, will become the first full time University attorney on July 1. Mr. Peterson will devote considerable time to the medical-legal problems of the School of Medicine.

Dr. Roscoe L. Pullen is editor of five new editions to the American Lecture Series in Internal Medicine.

WASHINGTON UNIVERSITY

New Instrument: A 24 million volt betatron for the treatment and study of cancer (and other biological and physical problems) has been completed by the Edward Mallinckrodt Institute of Radiology at Washington University School of Medicine. The instrument, housed in the Medical Center's new Barnard Free Skin and Cancer Hospital, is one of only half-a-dozen in the U. S. designed primarily for clinical use. Preliminary physical tests on the betatron are now being conducted by Dr. Michel Ter-Pogossian, physicist of the Institute. Full operation is expected by June under the supervision of Dr. William B. Seaman, Associate Professor of Radiology. Dr. Hugh M. Wilson, Professor and Head of the Department of Radiology, is Director of the Mallinckrodt Institute.

Annual Lecture: The 19th annual Leo Loeb Lectureship was delivered April 14 by Dr. George W. Thorn, Hersey Professor of Theory and Practice of Physic, Harvard University School of Medicine, who spoke on "Studies on the Adrenal Cortex in Man." The lectureship was established in 1935 by Mu Chapter, Phi Beta Pi, and honors Dr. Leo Loeb, Professor Emeritus of Pathology at the School of Medicine.

And More Lectures: Other recent lectures at the Medical School were given by Dr. Hermann Lehmann, St. Bartholomew's Hospital, London; Dr. A. G. E. Pearse, University of London, Postgraduate Medical School; and Dr. John B. Macdonald, Associate Professor of Dentistry, University of Toronto, Canada.

ST. LOUIS UNIVERSITY

Annual Reunion at A.M.A.: School of Medicine Alumni will again meet during the annual convention of the A.M.A. on Wednesday evening, June 23, at San Francisco. Dr. Douglas Toffelmier, 1927, vice president of Alumni, has reserved the Terrace Room of the Fairmont Hotel for a dinner dance on Wednesday evening and one of the best known bands in San Francisco. Plans call for reopening the bar after dinner for those more interested in an old fashioned gabfest with their former classmates and friends. The newly completed all-University film, "The University Story" will be shown. Early reservations point to a record crowd and alumni are urged to send their reservations now to Dr. Clement B. Grebel, Alumni Secretary, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis 4.

Special recognition will be given to the classes of 1904, 1929 and 1944. Alumni may meet the dean, Dr. James W. Colbert, Jr., who will be available during the meeting and at the banquet.

A hospitality room and representatives of the school and alumni will be on hand at the special alumni section near the registration area.

Book Review

PRACTICAL DERMATOLOGY—For Medical Students and General Practitioners by George M. Lewis, M.D., Professor of Clinical Medicine (Dermatology), Cornell University Medical College; Attending Dermatologist, The New York Hospital; Secretary, the American Board of Dermatology and Syphilology. W. B. Saunders Company, Philadelphia. 1952. Price $7.50.

This volume is designed primarily as a guide for medical students and physicians not specializing in dermatology. It bears a marked resemblance to that excellent work "Manual of Dermatology," by the Armed Forces Medical Council. Whereas the Army book had both photographs and diagrams, this volume is filled with photographs excellently showing the lesions described.

The beginning consists of practical descriptions of the various tests and other diagnostic means useful in skin disease as well as clear, short definitions of dermatologic definitions. The major part of the book consists of photographs and verbal descriptions of the many skin lesions.

The last sections are devoted to therapy. One criticism, possibly, is that this important section may be considered to be entirely too short.

This volume is easily readable, contains many self-explanatory photographs, and would be a valuable edition of the library of anyone who sees even small amounts of skin disease. S. L. G.

Making the Diabetic Diet fit...

Your patient may feel an outsider both at home and away from home when diabetes upsets his eating habits. Of course, a measured diet is vital. The trick is to fit that diet as closely as possible to the patient's personal preferences and way of life. Here are some diet "do's" to help in planning the menus.

At home—

Try to adapt favorite recipes to the diabetic diet. Then select vegetables, beverage, and fruit or dessert to complete the diet prescription for the meal.

Suggest that measured portions be served in dishes that fit the serving. A small portion on a large plate is not a happy prospect.

Where possible, let your patient use a food exchange list. He'll delight in the variations it provides.

Away from home—

Explain that insulin demands food with the urgency and regularity of an alarm clock. If a dinner party will be late, suggest a light snack at the usual mealtime with a corresponding caloric reduction in the delayed meal.

Allow extra carbohydrate for extra activity. And have your patient carry hard candies as a precaution against insulin reaction.

If possible, plan low-calorie wafers in the diet for times when others nibble canapés or chocolates.

A diet that fits in smoothly with your patient's family and social life means you'll have his fullest co-operation, and he'll lead a happier life.

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*Average of American beers

Letter to Missouri Medicine

The Change in Population

To the Editor:

A study of the changes in the population of Missouri is interesting. Altogether the state acquired an increase in the last ten years—about 150,000 which is about 4 per cent of the whole. The number of the newborn (about 90,000) does not equalize this gain and the conclusion is plain—many immigrants continue to settle in Missouri. The remarkable shift from rural to urban population is well known. To emphasize this statement a glance of the statistics is all that is necessary. Let me place a few counties side by side: In ten years Crawford County lost about 9 per cent; Phelps County gained 22 per cent; Shannon County lost about 30 per cent; Butler County gained about 12 per cent; Washington County lost about 16 per cent; Greene County gained 15 per cent.

These are comparative figures taken at random. Yet it is obvious that the big cities are rapidly growing, the smaller towns do not enlarge much and the farm population is dwindling enormously. Note these counties from North Missouri: Chariton, 18 per cent; Gentry, 17; Worth, 19; Macon, 15; Holt, 21 and many others. The greatest loss in the Ozarks was found in Shannon County, already mentioned. Several other counties showed large losses, as Reynolds, 26; St. Clair, 20; Douglas, 19.

But the large cities make up for all these losses and supply the state increment. Notice St. Louis County, plus 47; Boone, plus 37; Clay, plus 46; Jackson, plus 12; Greene, plus 15 and several others of lesser growth.

What does this mean? We do not need so many M.D.'s in the rural districts as we had thirty years ago. One question: does a shortage of doctors have a tendency to diminish the population? Perhaps it does to a limited degree. Old folks do not like to stay in any county where a physician's service is scarce.

We are doing fairly well in Crawford County (population about 12,000) as we have two young M.D.'s, two osteopaths and now two chiropractors—six doctors—one to 2,000. (Active M.D.'s—one to 6,000)!

Those of us who love the wide open spaces in the country can not be enthused about the tremendous growth of our two metropolitan areas. Consider the St. Louis area (in Missouri and Illinois) the gain in ten years has been about 250,000. At a general apportionment of 1 to 1,000, the increase alone will demand one half the physicians graduating from the two Universities. Do the remaining 250 supply the hiatus made by emigration and death? Even if all the graduates located in this area there would be no surplus.

The Kansas City area offers a similar problem. About 800,000 inhabitants, with a gain of 17 per cent in ten years. Does the Kansas Medical School help out, or shall we depend on the osteopaths?

Really, I believe that this shift from the county to metropolitan areas will diminish. Small cities and towns with their environment are growing in business. The enormous expense of paved streets, police and fire departments, and especially transportation will limit the increase. All cities in the state have large suburban areas. (The population around Steelville, Cuba and Cherryville demonstrates that one is not compelled to live in the city to belong to the non-farming population.) I expect the farming population to remain the same, but the suburbs of these towns will want a young doctor. Hospital? That will be a future problem. The young doctors will have to make the decision.

John Zahorsky, M.D.,
Steelville, Mo.

Dr. Stevens Honored

On the evening of April 5, during the recent Missouri State Medical Association meeting in St. Louis, thirty-three physicians, who are former students and alumni of Central College, Fayette, were present at a dinner given at the Hotel Jefferson in honor of Dr. Kenneth P. Stevens, Professor of Biology and Head of the Department of Biology at Washington and Lee University in Lexington, Virginia.

From 1930 to 1946, Dr. Stevens was Head of the Department of Biology and Advisor to premedical students at Central College. During this time more than one hundred of his students entered and graduated from medical schools. Numerous others entered schools of the allied professions.

Dinner in honor of Dr. Stevens.

Also present were Dr. C. E. Burford, St. Louis, Professor of Urology at St. Louis University Medical School and President of the Board of Curators of Central College; Dr. Henry G. Schwartz, St. Louis, Professor of Neurosurgery at Washington University Medical School; Dr. W. A. Bloom, Fayette, Past President of the Missouri State Medical Association; Dr. William J. Shaw, Fayette, President of the Missouri Academy of General Practice; Dr. E. P. Puckett, Fayette, former Dean of Central College; Mr. Lester Shell, Professor of Chemistry at Central College, and Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association.

Brief talks by Drs. Burford, Schwartz, Bloom, Shaw and Puckett, extolled Dr. Stevens as a leader in premedical education. His insistence on a broad, general education and high standards of scholarship for future doctors had done much to raise the level of premedical preparation throughout the Middle West. He had also worked tirelessly to improve the liaison between medical schools and the undergraduate colleges and universities, immeasurably smoothing the

Wine in Geriatrics?

"Wine is the nurse of old age..."
—Galen

Since long before the time of Galen, wine has been recommended not only for its epicurean delights but for its value in medicine—notably as an aid in combating the physical and emotional infirmities of old age.

This historical application, now supported and expanded by recent laboratory and clinical research* in American medical centers, is important to modern geriatricians—to physicians who today are giving added years of life to their patients, and who are asked to make these added years pleasant and comfortable.

New investigations have demonstrated, both in the laboratory and in the clinic, that the moderate use of wine can increase the appetite in anorexia.

They have shown that wine in judicious quantities can stimulate the lax and achlorhydric stomach of the elderly, assist in providing a more adequate fluid intake, and improve elimination by enhancing the important gastrocolic reflex.

As a gentle sedative—sometimes called the safest of all sedatives for old age—wine can help allay restlessness and irritability, easing the fears and anxieties of the elderly. The euphoria—the "glowing sense of well-being"—produced by a glass of Port, Sherry or table wine, may aid significantly in overcoming the all-pervading sense of uselessness which too often mars the last decades of life.

Physiologically, wine acts gently and moderately as a vasodilator, diuretic, relaxant, and aid to nutrition and digestion. But perhaps of equal importance, it acts psychologically as well—as a mark of "something special" to grace the diet of the aging patient.

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*Research information on wine is available upon request.

path for prospective physicians. His qualities as a teacher and leader have left a lasting imprint on all those who had the good fortune to study under him or work with him.

Dr. Stevens, in his response, pointed out the great contributions made by Central and other midwestern colleges to scientific education. Citing the Knapp-Goodrich report ("Origins of American Scientists," *Science,* May 11, 1951) which summarized results of investigation of undergraduate training of scientists, he stated that such colleges have been the main source of men who subsequently became leaders in various fields of science. With the rapidly expanding needs for personnel of this nature, he emphasized the necessity for continued support and improvement of such institutions.

Former students and alumni of Central College who attended the dinner were the following: Drs. John T. Crowe, Cape Girardeau; O. W. Cook, Caruthersville; Ercell Miller and Glen McElroy, Columbia; William J. Shaw, Jr., Fayette; William C. Allen, Glasgow; Sanford F. Cockrell, Independence; Robert Wortman, Kansas City; Chester R. Peck, Kennett; Ben B. Hurst, Lebanon; Joe Ward, Lexington; James W. Willoughby, Liberty; Elvin P. Imes, Maryville; Arthur S. Graves, Mount Vernon; James J. Pascoe, Nevada; Dr. Charles C. Reeder, New Madrid; Robert H. Hodges, North Kansas City; James R. Loughead, Poplar Bluff; John R. McDaniel and Richard V. Riddell, St. Joseph; Harvey R. Butcher, Gladden V. Elliott, Charles R. Gulick, C. Rush McAdam, Earl A. Powell, David E. Smith and C. Max Witt, St. Louis; Norman Adair, Covington, Kentucky; Robert M. Campbell, Portsmouth, Virginia; Col. John R. Hall, M.D., Fort Leavenworth, Kansas; Dr. Robert A. Utterback, Iowa City, Iowa.

Drs. Riddell, Powell and Smith had charge of the arrangements for the dinner. Dr. McDaniel served as Master of Ceremonies.

R. V. Riddell, M.D.
St. Joseph, Mo.

Anaphylactic Death Following Repository Penicillin

(Continued from page 483)

including penicillium digitatum and trichophyton. Treatment, consisting of drugs for symptomatic relief, avoidance of some substances to which he was sensitive, and hyposensitization to others, gave good results. Later, however, cooperation was poor and treatment was given irregularly. On December 1, 1953, he consulted another physician who diagnosed his trouble as bronchial asthma with respiratory infection and administered 1 cc. containing 600,000 units of N, N' dibenzylethylenediamine dipenicillin G. With this injection there was no bleeding at the site of injection, and no blood in the syringe on aspiration. Within five minutes the patient vomited, became cyanotic, fell to the floor and died, despite intravenous adrenalin, antihistamines and coramine, as well as the use of oxygen and a pulmotor. At autopsy, the only finding of importance was moderate plugging of the bronchioles by mucus.

This case presents several points of interest. First, approximately three and one half years before the fatality, positive immediate and 24 hour reactions to penicillin and trichophyton had been observed. The man had persuaded various doctors to give penicillin to break up a "cold." With the help of the family these doctors were contacted, and as far as is known, N, N' dibenzylethylenediamine dipenicillin G had not been administered. He had approximately fifteen injections of procaine penicillin in the past three and one half years. It is difficult to speculate on whether the patient was sensitive to the entire molecular composite he was given or to only the penicillin complex. There is no record of his receiving this N, N' dibenzylethylenediamine dipenicillin G previously. If true, it would be difficult to understand how he could be sensitive to the entire molecular complex. He must have been sensitized to the complex compound by the previously injected procaine penicillin. Lastly, as far as is known, this is the first fatality to N, N' dibenzylethylenediamine dipenicillin G.

Stanley L. Goldman, M.D.

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Musings of the Field Secretary

(Continued from page 485)

Sennott, M.D., Jefferson City, member, Committee on Infant and Child Care of the Missouri State Medical Association, is a member of this program planning committee. Here is a concrete example of a matter relating to school health with which the Association's new Committee may well be concerned. The main objective of this workshop is to bring about cooperative planning for better health for school age children. W. W. Bauer, M.D., Director, Bureau of Health Education of the American Medical Association, will play a prominent part in this three-day program. Dr. **Guy N. Magness**, University City, member of the Committee on Infant and Child Care of the Missouri State Medical Association is also on the Workshop program.

More than one hundred people, representing all sections of the state of Missouri, attended the spring Conference of the Missouri Health Council on Friday, April 30, at the Governor Hotel in Jefferson City. The day's program was devoted to a discussion of "Health Protection for Rural Missouri." A number of short formal talks as to what health insurance contributes to "Health Protection for Rural Missouri" were given by representatives of commercial health and accident insurance companies and by representatives of the Blue Cross-Blue Shield plans in the State of Missouri. Following these formal presentations one and a half

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hours round table panel discussion, with audience participation, was held. Mr. Howard Brower, Assistant Secretary of the Council on Medical Service of the American Medical Association, moderated this panel discussion.

The concluding talk of the day's program was given by Mr. Parke Banta, General Counsel of the Department of Health, Education and Welfare, Washington, D. C. Mr. Banta discussed "The Administration's Health Program" which includes a proposal for reinsurance of health plans, inclusion of physicians in social security, changes in public health grants, inclusion of certain diagnostic and treatment facilities under the present Hill-Burton law and various other proposals.

Physicians who attended the meeting were: **H. E. Petersen**, M.D., St. Joseph, President of the Missouri State Medical Association; **E. Royse Bohrer**, M.D., Jefferson City, Secretary, Missouri State Medical Association; Katherine Kiehl, M.D., Joplin, Secretary Jasper County Medical Society; **James R. Amos**, M.D., Jefferson City, Director, Missouri State Division of Health; Lynn M. Garner and C. W. Meinershagen from the Missouri Division of Health, Jefferson City, and **Wallace S. Petty**, M.D., Macon County Health Officer, Macon.

Others Say

Everybody's Welcome

"It is the desire of the Veterans Administration that our professional staff be a part of organized medicine in this community, and as you know, many of our full-time physicians are members of your local Medical Society. At this time I would like to extend an invitation to you and all officers and members of your Medical Society to visit this hospital. It would be an honor and privilege to have any meetings possible of your group or subgroups here in the hospital, and we do have an auditorium that will seat approximately 250 people. Conducted tours would be arranged in conjunction with such meetings.

"I know I speak for all of our full-time physicians and do hope you and as many other members of your society as possible will inspect this hospital at your convenience."—John W. Claiborne, Jr., M.D., Manager of new V.A. Hospital, St. Louis, Letter to St. Louis Medical Society.

Another Way Via the VA

Socialized medicine is being insidiously but indubitably forced upon a people who do not want it by a rapidly expanding system of free medical care for illnesses of any kind to veterans and their dependents. Forty per cent of our male wage earners have already served a hitch in the armed forces and are eligible for treatment in one of the VA hospitals which are already treating about 100,000 bed patients per day. Two out of every three of these patients are being treated for non-service connected illnesses. The number of veterans is so rapidly increasing, it is estimated that in a few short years at least half of our able-bodied men will be able to claim free hospital-medical care. Our present laws make this service available to any veteran who will declare that he needs and cannot pay for medical care. His declaration may not legally be questioned.—News & Views, St. Louis Academy of General Practice.

Are Things Really That Tough?

What has happened to our hospitals? What has happened to the people who work in them? Let me go on record right now that I think the great majority of the workers in the hospitals are hard-working, conscientious, kind and sympathetic, but there is a minority who appear to be cross, sullen, unsympathetic, and rough and careless in handling the delicate techniques of diagnosis and treatment.

When a physician finds that one of his patients has been neglected or badly treated he may fuss and cuss and muss his hair, but usually is met by the bland statement from the nurse, the supervisor and the administrator: "We are doing the best we can . . . after all we are so crowded and so shorthanded." What then? Hospitals may be overcrowded and staffs shorthanded, but that is no excuse for what seems at times failure to enforce discipline and insistence that good old-fashioned rules of proper care and attention be given patients.—G. Wilse Robinson, Jr., M.D., Editorial, *Jackson County Medical Bulletin.*

Book Reviews

Clinical Obstetrics, by Members of the Staff of the Pennsylvania Hospital. Edited by Clifford B. Lull, M.D., Late Director, Division of Obstetrics and Gynecology, Pennsylvania Hospital; and Robert A. Kimbrough, M.D., Director of the Division of Obstetrics and Gynecology, Pennsylvania Hospital; Professor of Gynecology and Obstetrics, Graduate School of Medicine, University of Pennsylvania; Gynecologist to the Graduate Hospital. With 392 illustrations and 8 color plates. Philadelphia, London and Montreal. J. B. Lippincott Company. 1953. Price $10.00.

This is a textbook purporting to be designed primarily for the teaching of obstetrics to the students at the University of Pennsylvania and based upon the practices there. It is, of course, filled with sound teaching and is a well put together book. Besides the

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excellent format I was particularly taken with the book's organization and in particular with the inclusion of several well written chapters on subjects only hinted at or passed over briefly in most obstetric texts. These include a chapter on "Fertility and Infertility" and another on "Radiology" as applied to the problems of the obstetrician. Both of these are fields which have been neglected to a greater or lesser extent so far as the general practitioner is concerned and a concise presentation of the subject will do much to keep both today's and tomorrow's practitioners informed. In addition there is an excellent chapter on nutrition in pregnancy and another on obstetrical nursing procedures. I hope that the day of home deliveries is gone forever but the later chapter will be a boon to those who may be forced into such a situation.

There is an exceptionally fine chapter on anesthesia by Robert A. Hingson who, with Dr. Lull, wrote one of the outstanding books on the subject a few years ago and who did so much to popularize continuous caudal analgesia and anesthesia. As might be expected the material is slanted a little in favor of conduction types of anesthesia, an attitude with which I have no fight.

I wish to toss a final bouquet by mentioning the chapter on the management of the newborn infant. Here again is a subject that is frequently overlooked by the present day obstetrician. With a plethora of good pediatric care the obstetrician need not be bothered with many of these problems. However such movements as that of the Cornelian Corner and various rooming-in projects are tending to stress the unity of the mother-child relationship and it is probably well for the obstetrician to enter into this from his end as well as the pediatrician later on. D. L. B.

Textbook of Surgery. Edited by H. F. Moseley, M.A., D.M., M.Ch. (Oxon), F.A.C.S., F.R.C.S. (Eng.), F.R.C.S. (C), Assistant Professor of Surgery, McGill University; Associate Surgeon, Royal Victoria Hospital, Montreal, Canada. With foreword by G. Gavin Miller, M.D., C.M., M.Sc., F.R.C.S. (C), F.A.C.S., Chairman of the Surgical Department, McGill University; Surgeon-in-Chief, Royal Victoria Hospital, Montreal, Canada. With 460 Text Illustrations and 46 Color Plates. St. Louis. C. V. Mosby Company. 1952. Price $15.00.

This book has been written with a purpose: to provide the medical student with an overall survey of the field of surgery as it is today. It is a student approach, resulting from student forums and written by the collaboration of some twenty-eight members of the faculty of the School of Medicine at McGill University, and mostly by the younger men.

It is up-to-date, brief, balanced and contains a profusion of visual aids.

An approach has been made to a problem which has been much neglected in textbooks for students, namely, a failure to indicate clearly the relative importance of a sometimes confusing array of etiologic diagnostic and therapeutic factors and procedures.

The introductory chapters give a brief history of surgery, a brief but inclusive and up-to-date survey of the reaction of tissue to injury, and a concise, complete and up-to-date presentation of bacteriology, including many of the newer developments.

Inclusion of pictures of surgical instruments, Langer's lines, the dermatomes of Keegan, and some of the sometimes oversimplified but vivid illustrations of Frank Netter and many other excellent illustrations, is sure to be welcomed by the student.

Although, because of its brevity, the discussion of treatment is necessarily didactic and somewhat dogmatic, this is no real criticism in a volume of this kind, and the book is an excellent one and should fulfill its purpose admirably. J. R. M., Jr.

An Atlas of Surgical Exposures of the Extremities, by Sam W. Banks, M.D., Associate Professor of Orthopedic Surgery, Northwestern University Medical School; and Harold Laufman, M.D., Ph.D., Associate Professor of Surgery and Director of Experimental Surgery, Northwestern University Medical School. 391 pages with 552 illustrations on 179 plates. Philadelphia and London. W. B. Saunders Company. 1953. Price $15.00.

This book is a pictorial Atlas designed to serve the medical student and resident in surgery and to serve as a timely "refresher" to the experienced surgeon. The authors state that in order to obtain the widest range of usefulness, many of the simplest as well as the more complicated incisions have been included in this volume. The descriptive text accompanying each illustration is kept at a minimum. It is stated that emphasis on the preservation of function of the part under consideration is held to be of prime importance in this work, and the authors believe that these surgical approaches illustrated to be both practical and correct anatomically.

The illustrations presented in this Atlas are reproductions of drawings which were made from photographs of dissections made on cadavers. Each step of each exposure was photographed as a description of the procedure was dictated. These photographs then served as a basis for rough drawings from which the final drawing was produced. The final drawings represent, the authors state, a faithful representation of the anatomic findings encountered at surgery (cadaver surgery).

All illustrations are original with no adaptations or borrowed illustrations being used. The authors claim no originality in any surgical procedure described in the Atlas. Proper names have been avoided entirely in designating the various surgical approaches. The authors indicate that the work is a composite effort of the Department of Surgery of Northwestern Univer-

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sity and of the Photographic and Medical Art Departments of the University.

The first section of the Atlas deals with the region of the shoulder girdle. Surgical approaches of this region are then presented, and the presentation consists of a pictorial presentation accompanied by a short list of surgical indications which in turn is followed by a description of the surgical procedure. In each case the skin incision is shown in the drawing, usually with the underlying skeletal structures drawn in. The deeper structures are then shown in a second or third or even fourth illustration on the same page, or the following page is used.

The surgical approaches used on the upper extremity from the shoulder girdle distally to the fingers is then presented in the Atlas. A similar procedure is then followed relative in the lower extremity beginning at the region of the hip joint.

The illustrations throughout are in black and white and are to some extent diagrammatic and somewhat over-simplified, particularly the more difficult of the incisions. This Atlas will be found quite useful to the practicing surgeon dealing with trauma, the orthopedist and the industrial surgeon, as well as the general surgeon. L. E. R.

Studies in Visual Optics, by Joseph I. Pascal, B.S., M.A., O.D., M.D. Licentiate in Optometry and in Medicine by the University of the State of New York; Director of Eye Department, Stuyvesant Polyclinic; Attending Opthalmologist, New York Polyclinic Medical School and Hospital, Outpatient Department; Lecturer in Ophthalmology, New York Polyclinic Medical School and Hospital. Published in St. Louis by the C. V. Mosby Company, 1952. $12.50.

A teacher of many years experience, the author proposes in his preface to an 800 page treatise, to (1) "present some old material in a way . . . most easily grasped and absorbed by undergraduate and post-graduate students," and (2) "to present in an orderly manner . . . new ideas, new methods, applications, simplified formulas, memory aids for things easily forgotten . . . and a host of other helpful hints . . . accumulated in . . . some forty years of teaching." He proceeds to deal with the topic in an effort to clear some of the haze of technicality from the didactics of old textbooks.

Beginning with lenses he devotes five chapters to their physical and optical properties, with a bit of higher mathematics as an introduction to the basic laws of refraction, and proceeds to a study of the various combinations of lenses and methods of transposing, or changing the surface power of a lens without changing its total power, for the purpose of promoting greater comfort to the patient or producing a less expensive glass. He gives what he calls his "5 word rule" for this transposition making it a simple procedure. The Sum of the Sphere and Cylinder for the new Sphere, keeping the cylinder value, but changing the sign of the cylinder from plus to minus, adding 90 if the given axis is 90 or less, or subtracting 90 if the given axis is above 90. In short his formula in skeleton is "Sum—Sphere—Change Sign—Axis."

There are several chapters devoted to theory, fundamentals, principles and technic of retinoscopy, describing both geometric theories and non geometric exposition. In a discussion on the Radian method of calculations he shows how it can check accuracy of the Snellen chart, and by measuring the size of any print letters, one can calculate visual acuity when a regular test type card is not available.

He deprecates the increasing custom of sending all children with 20/70 or less vision to sight conservation classes, and stresses the need for "vigorous monocular training" both before and during binocular training for the best results in orthoptic training.

A chapter elucidates the uses of dynamic retinoscopy with an interpretation of dynamic findings. Another is devoted to cylinder refraction. He takes up axes and angles, depicting the effects of Positive and Negative Angle Kappa in the determination of strabismus measurements. He goes into an elaborate discussion of the cardinal points and describes their role in the correction of ametropia. He makes a study of myopia and its relation to muscle imbalance and accommodation, and the use of drugs, prisms and lenses to decrease the so called "school myopia." The use of the stereoscope is advocated to relieve the discomfort incident to the first wearing of lenses to correct ametropia; then he touches briefly on the subject of aniseikonia.

General laws and phenomena of refraction are adequately dealt with. Then follows an interesting study of the ocular muscles, and an enlightening dissertation on the subject of contact lenses.

Throughout, he makes use of a vast number of "formulas" for the aid of "students who sometimes have to know formulas for examination purposes." He mixes the simpler forms with the more advanced studies in geometric optics to such an extent that it becomes somewhat confusing to those who are not grounded in higher mathematics.

On the whole, the book is a highly scientific treatise on "Visual Optics," written by an erudite student of the subject. H. F. G.

Headaches. Their Nature and Treatment. By Stewart Wolf, M.D., Professor and Head of the Department of Medicine, University of Oklahoma School of Medicine; and Harold G. Wolff, M.D., Professor of Medicine (Neurology), Cornell University Medical College. Illustrated. Boston. Little Brown and Company. 1953. Price $2.50.

This small volume of 174 pages is written for the layman. These authors are eminently qualified to write about the subject having spent twenty-five years in study and research on headaches. Dr. H. G. Wolff's "Headache and Other Head Pain," published in 1948, is one of the classic monographs on the subject. The present volume discusses briefly the usual organic causes for headache such as brain tumors, brain abcess, meningitis, hypertensive headache, traumatic headaches.

The greater part of the book is devoted to migraine, tension headache and headaches related to emotional disturbances. Seventy-eight pages are devoted to migraine. There are detailed histories illustrating the psychiatric aspect of migraine and how patients with migraine may be helped by the psychiatric approach rather than with the use of drugs.

Throughout the book, the authors emphasize the mechanisms of headache production. There are three fundamental mechanisms: (1) vascular; (2) muscle tightness around neck and scalp; (3) swelling of mucous membrane of nasal structures. Ninety per cent of headache of the first two groups and a large proportion of the third group occur as result of maladjustment of the individual to his daily problems and challenges. H. C. W.

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The Journal of the Missouri State Medical Association

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Breast & Thyroid Surgery, One Week, June 21
Thoracic Surgery, One Week, October 11
Esophageal Surgery, One Week, October 4
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Gastroenterology, Two Weeks, October 25
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Meat...

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A recent study points out that patients with peptic ulcer, ulcerative colitis or regional enteritis can effectively utilize good quality protein from animal sources.* Protein hydrolysates apparently are less effectively utilized than intact protein.

In patients with uncomplicated peptic ulcer on regimens providing intact animal proteins the patterns of amino acid excretion in urine and feces were similar to those in normal subjects. In patients with ulcerative colitis or regional enteritis the increased output of nitrogen and amino acids in the feces was attributed to loss of intestinal secretions, inflammatory exudate, and blood. Although the patients utilized intact animal proteins effectively, the authors suggested that an intake of more than one gram of dietary protein per kilogram of body weight might be useful.

On the basis of this study a dietary plan recommended for treatment of gastrointestinal disorders provides at least one gram, of protein per kilogram of body weight, but preferably more. Meat constitutes one of the important sources of animal protein in the plan.

In dietotherapy, meat serves many important physiologic and nutritional functions. Its appetizing flavor animates the desire to eat and promotes good digestion. Meat is easily and almost completely digested. Its high content of protein provides goodly amounts of all the essential amino acids well supplemented with others. Meat also contributes valuable amounts of many B vitamins and of essential minerals, especially iron, phosphorus, and potassium.

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*Kirsner, J. B.; Brandt, M. B., and Sheffner, A. L.: Diet and Amino Acid Utilization in Gastrointestinal Disorders, J. Am. Dietet. A. *29*:1103 (Nov.) 1953.

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March 27-30, 1955

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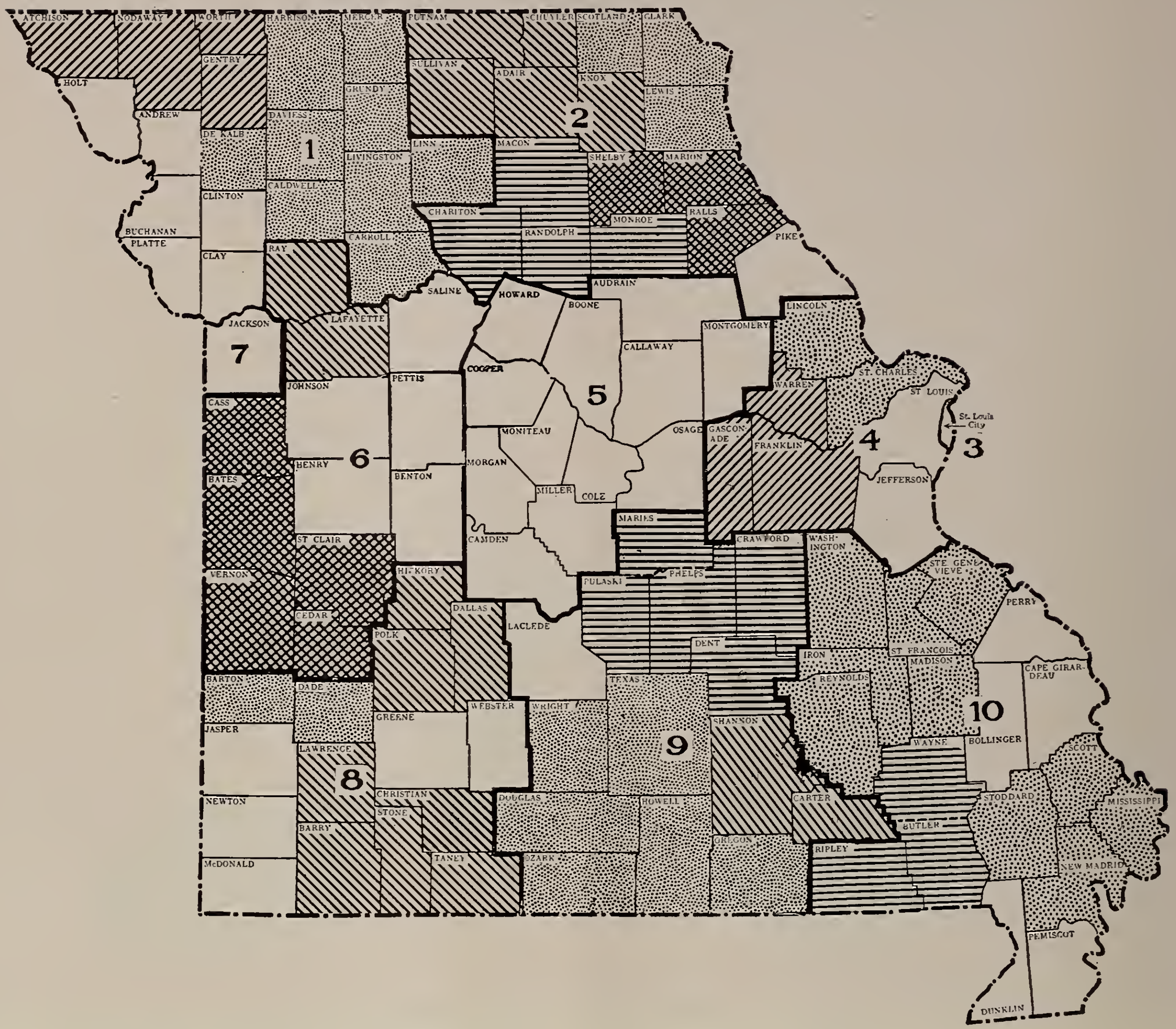

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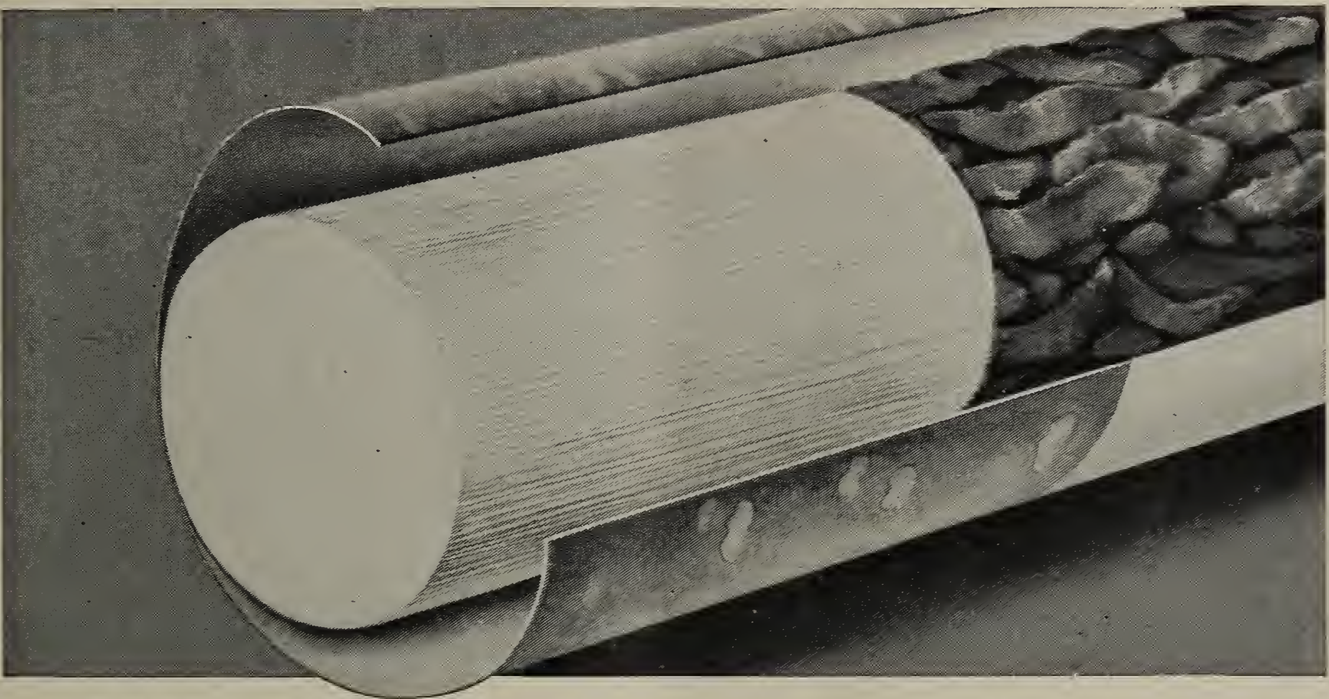

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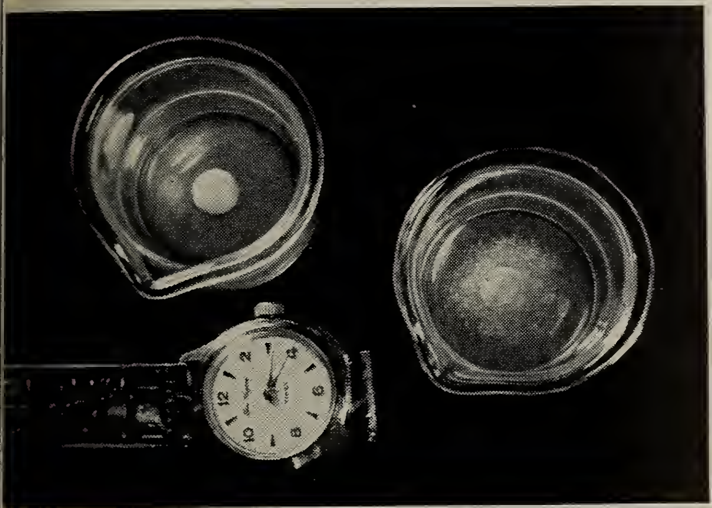

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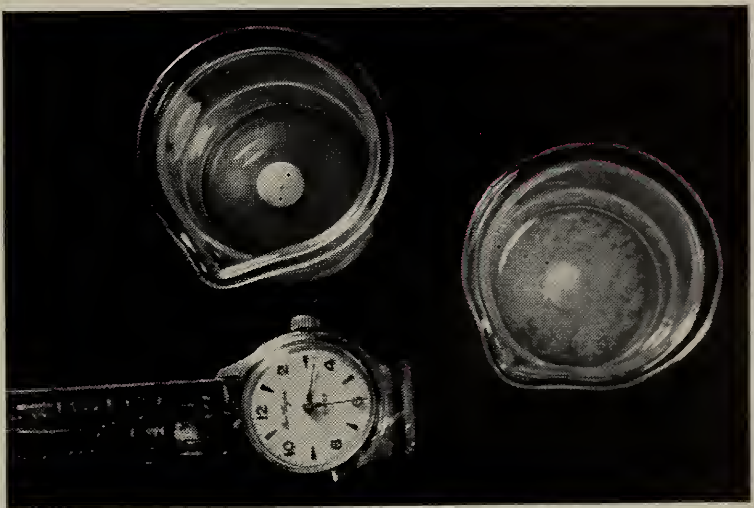

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Missouri Medicine

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Vol. 51 **July, 1954** **Number 7**

Minutes of the House of Delegates

Ninety-Sixth Annual Session
Hotel Jefferson, St. Louis
April 4, 5, 6, 7, 1954

Sunday Session

The first meeting of the House of Delegates of the Ninety-sixth Annual Session of the Missouri State Medical Association was called to order at 10:30 a. m., April 4, in the Crystal Room, Hotel Jefferson, St. Louis, with Victor E. Scherman, M.D., St. Louis, Speaker, presiding.

Officers, Councilors and Delegates present during the Annual Session follow:

Officers

President	Guy N. Magness, University City
President-Elect	H. E. Petersen, St. Joseph
Secretary	E. Royse Bohrer, Jefferson City
Treasurer	Carl F. Vohs, St. Louis
Vice President	T. E. Ferrell, Springfield

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2nd District	W. F. Francka, Hannibal
3rd District	R. O. Muether, St. Louis
4th District	Otto W. Koch, Clayton
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6th District	G. C. Stauffacher, Sedalia
7th District	Victor B. Buhler, Kansas City
8th District	W. S. Sewell, Springfield
9th District	J. H. Summers, Lebanon
10th District	Ben M. Bull, Ironton

Delegates
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Buchanan	Joseph L. Fisher, St. Joseph
Buchanan	T. E. Potter, St. Joseph
Clay	S. O. Schroeder, Liberty
Grand River	
Carroll	E. W. Allen, Carrollton
Grundy	Charles H. Cullers, Trenton
Daviess	Edward E. Nixon, Gallatin
Harrison	M. Gearhart, Bethany
Linn	John R. Dixon, Brookfield
Nodaway-Atchison-Gentry-Worth	William R. Jackson, Maryville
Nodaway-Atchison-Gentry-Worth	Frank B. Matteson, Grant City

Second District

Chariton-Macon-Monroe-Randolph	Edward Johnson, Macon
Chariton-Macon-Monroe-Randolph	Thomas S. Fleming, Moberly
Lewis-Clark-Scotland	Perry W. Jennings, Canton
Marion-Ralls-Shelby	Wyeth Hamlin, Palmyra
Marion-Ralls-Shelby	T. J. Hoerchler, Shelbina
North Central	Val E. Miltenberger, Kirksville
Pike	Charles H. Lewellen, Louisiana

Third District

St. Louis City	Duff S. Allen, St. Louis
St. Louis City	Henry C. Allen, St. Louis
St. Louis City	A. N. Arneson, St. Louis
St. Louis City	Willard Bartlett, St. Louis
St. Louis City	Walter Baumgarten, St. Louis
St. Louis City	Arthur R. Dalton, St. Louis
St. Louis City	Joseph C. Edwards, St. Louis
St. Louis City	Stanley F. Hampton, St. Louis
St. Louis City	George L. Hawkins, St. Louis
St. Louis City	J. Ernest Jensen, St. Louis
St. Louis City	David N. Kerr, St. Louis
St. Louis City	Louis H. Kohler, St. Louis
St. Louis City	Bruce Kenamore, St. Louis
St. Louis City	Curtis H. Lohr, St. Louis
St. Louis City	Charles E. Martin, St. Louis
St. Louis City	Paul F. Max, St. Louis
St. Louis City	Sam J. Merenda, St. Louis
St. Louis City	Mary E. Morris, St. Louis
St. Louis City	Arthur W. Neilson, St. Louis
St. Louis City	Francis X. Paletta, St. Louis
St. Louis City	Joseph C. Peden, St. Louis

Drs. Petersen, Magness and Buhler register.

St. Louis City	Douglas A. Ries, St. Louis
St. Louis City	Victor E. Scherman, St. Louis
St. Louis City	Wendell G. Scott, St. Louis
St. Louis City	Daniel L. Sexton, St. Louis
St. Louis City	Don C. Weir, St. Louis
St. Louis City	Robert D. Woolsey, St. Louis

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Franklin-Gasconade-Warren	Robert M. Keller, Owensville
Franklin-Gasconade-Warren	Herbert H. Schmidt, Marthasville
Jefferson	Charles E. Fallet, DeSoto
Lincoln-St. Charles	Norman K. Muschany, Troy
Lincoln-St. Charles	Gerald A. Reeves, St. Charles
St. Louis County	William S. Brown, St. Louis
St. Louis County	Maurice A. Diehr, St. Louis
St. Louis County	Oscar P. Hampton, St. Louis
St. Louis County	Carl C. Irick, Webster Groves
St. Louis County	James R. Meador, Clayton
St. Louis County	Roy A. Walther, Sr., Overland
St. Louis County	Paul R. Whitener, Overland

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Boone	James C. Cope, Columbia
Boone	A. R. McComas, Sturgeon
Callaway	George F. Wood, Fulton
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Cooper	Byron M. Stuart, Boonville
Howard	W. A. Bloom, Fayette
Miller	W. L. Allee, Eldon
Moniteau	Edgar A. Kibbe, California
Montgomery	E. J. T. Andersen, Montgomery City
Morgan	Ruth Kauffman, Versailles

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Saline	Robert C. Haynes, Marshall
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Bates	Arthur L. Hansen, Butler
Cass	Edward S. Jones, Harrisonville
St. Clair	William H. Ellett, Appleton City
Vernon	C. Braxton Davis, Nevada

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Jackson	W. Wallace Greene, Kansas City
Jackson	R. Lee Hoffman, Kansas City
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Jackson	Frank B. Leitz, Kansas City
Jackson	Terry E. Lilly, Jr., Kansas City
Jackson	Gerald L. Miller, Kansas City
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Jackson	Raymond L. Morrow, Kansas City
Jackson	Stoughton F. White, Kansas City
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Dallas-Hickory-Polk	Grover C. Plummer, Buffalo
Greene	Thomas E. Ferrell, Springfield
Greene	W. J. Marshall, Springfield
Greene	Walter W. Tillman, Springfield
Jasper	B. E. DeTar, Joplin
Jasper	R. M. Ferguson, Webb City
Ozarks	
Barry	Mary J. Newman, Cassville
Christian	Stanley D. Roper, Ozark
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Taney	William C. Magness, Branson
Webster	T. M. Macdonnell, Marshfield

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Carter-Shannon	T. W. Cotton, Van Buren
Laclede	H. W. Carrington, Lebanon
Phelps-Crawford-Dent-Pulaski-Maries	Francis L. Kozal, Belle
Phelps-Crawford-Dent-Pulaski-Maries	William R. Lytle, Rolla
South Central	
Howell	M. B. Perkins, Willow Springs
Oregon	Claude W. Cooper, Thayer
Texas	John B. Kelly, Houston

Tenth District

Butler-Ripley-Wayne	Wm. E. Henrickson, Poplar Bluff
Cape Girardeau	H. D. Ridings, Cape Girardeau
Dunklin	Paul Baldwin, Kennett
Mineral Area	
Iron	Ben M. Bull, Ironton
St. Francois	H. M. Roebber, Bonne Terre
Washington	George F. Cresswell, Potosi
Pemiscot	O. W. Cook, Caruthersville
Perry	J. J. Bredall, Perryville
Semo	
Mississippi	John E. Dernoncourt, Charleston
New Madrid	John J. Killion, Portageville
Scott	W. O. Finney, Chaffee

The Reverend John F. Caskey, University Methodist Church, University City, delivered the invocation.

W. W. Tillman, M.D., Springfield, reported for the Committee on Credentials.

Mr. T. R. O'Brien read the roll of delegates and alternates, which showed a quorum present.

SPEAKER: The next order of business is the reading of the minutes of the previous meeting. They were published in the July 1953 issue of MISSOURI MEDICINE. What is your pleasure?

Upon motion, duly seconded, the minutes were approved as published.

The Speaker appointed the following Reference Committees and gave the time and room number for the meeting of each committee:

Reference Committee on Amendments to the Constitution and By-laws

Sam J. Merenda, St. Louis, Chairman.
A. R. McComas, Sturgeon.
William C. Mixson, Kansas City.

Reference Committee on Resolutions

Louis H. Kohler, St. Louis, Chairman.
H. W. Carrington, Lebanon.
Gerald Miller, Kansas City.

Reference Committee on Miscellaneous Affairs

T. E. Potter, St. Joseph, Chairman.
T. E. Ferrell, Springfield.
James R. Meador, Clayton.

Reference Committee on Medical Education and Public Welfare

H. D. Ridings, Cape Girardeau, Chairman.
Wyeth Hamlin, Palmyra.
D. R. Edwards, Sedalia.

W. Wallace Greene, Kansas City.
Arthur W. Neilson, St. Louis.

Reference Committee on Reports of Officers

Joseph C. Williams, Kansas City, Chairman.
W. L. Allee, Eldon.
Joseph C. Peden, St. Louis.

Reference Committee on Technical Exhibits

B. E. DeTar, Joplin, Chairman.
M. C. Johnson, Richmond.
C. C. Weger, Keytesville.
Carl C. Irick, Webster Groves.

Reference Committee on Scientific Exhibits

B. M. Stuart, Boonville, Chairman.
M. S. Wepprich, Washington.
C. H. Lewellen, Louisiana.
Walter Baumgarten, St. Louis.
G. C. Plummer, Buffalo.

Guy N. Magness, M.D., University City, gave the President's Message as follows:

PRESIDENT'S MESSAGE

Mr. Speaker and members of the House of Delegates: First, before I start on this voluminous manuscript here, I would like to say I am very happy to be here this morning.

Shortly after I was named your President about two months ago, I was struck by the thought of what a unique position I would be in when today arrived—the time for your retiring President to report to you on some of the accomplishments of the past year.

Other retiring presidents have had to be cautious. They purposely exercised restraint in their reviews of the forward steps the Association took during their administrations with an honest and commendable wish to avoid saying anything that would suggest they were asking for personal credit for the good things of the year.

My own situation is entirely different. I could not possibly be accused of inviting a pat on the back for the things I shall bring out in this report. As I tried to make clear to every member in a recent message in our journal, the big work of the year was completed by the time the Council assigned me to complete the term of office of the late E. Claude Bohrer. Credit for the accomplishments of the year belong to him and to those who worked so closely with him.

In any event, I can approach my job today with a sort of enthusiasm my predecessors felt they should not express. So, to start right off, I want to say that I think the past twelve months were some of the best and certainly some of the busiest in the Association's history. Many matters affecting the health and welfare of all the people of Missouri came before the Association. Several important new programs and projects were initiated by the Association. And the Association continued to make progress toward meeting a number of its long term objectives—objectives that mean much to the medical profession and to all the people of our state.

The following are some of the jobs that were started —jobs Dr. Bohrer's real successor, Dr. Petersen, will be called on to carry out—and some of the jobs that were completed. I will not, of course, try to cover all of the things that were done. These simply represent a cross-section of the matters that seem most important to me. Here, then, are some of the accomplishments of the year.

First, and I believe most important, was the appointment of a special committee to study in detail the problems related to the licensure of practitioners of the healing arts in Missouri. The scope of the committee's work was big. The job was a very complex one. But the committee finished their work in time to submit a final report to the Council early in February. Their report was accepted and it will be submitted to you for your consideration at this annual meeting. I know that Dr. Petersen, who served as a member of the special committee, will want to say something about the group's study. He is far more qualified to talk about it than I. I do want to say that I know of the many hours each member of the committee devoted to his job. I know of the hard work they did. These men deserve the Association's deepest thanks.

Sessions of the House were well attended.

Blue Cross and Blue Shield continued to make excellent progress through the year. Total membership in Missouri's two Blue Cross plans stood at 1,175,000 at the end of 1953, a gain of about 24,000. The Blue Shield plans ended the year with a total membership in the state of 697,000, an increase of more than 52,000 from the year before. While the primary emphasis of Blue Cross and Blue Shield is on enrollments through organized groups, nongroup enrollment programs were conducted this and last year with a view to opening membership opportunities to more and more Missourians.

A subject that has been of great interest is the question of Blue Shield payment procedures as they relate to benefits for anesthesiology, pathology, radiology and other special services. As the Association should have on record some definitive policy recommendation in this connection, the matter will be on the agenda of this meeting of the House.

There is one matter that will come before you this week that I am personally very deeply interested in as it bears on the field of medicine in which I have spent most of my life—the field of school health. Your Committee on Infant Care has recommended that the Missouri State Medical Association develop an active and continuing school health program—the sort of program now conducted by medical associations in many other states. There are any number of elements in the whole school health problem on which the schools of Missouri would welcome the counsel of the physicians of Missouri. The Committee on Infant Care recommends a long overdue public service step for the Association which I am sure you will agree deserves our whole hearted support.

This has been another year of real achievement for our Physicians' Placement Bureau, the Association's important public service program sponsored by the MSMA Committee on Rural Medical Service. In 1953, the bureau corresponded or had personal interviews with several hundred young physicians who were seeking locations. A conservative estimate by the bureau indicates that it had a direct or indirect influence on the location of about 50 of the doctors who last year established practices in Missouri towns of under 12,000 people. Since the establishment of this program early in 1946, the bureau has taken a part in bringing about 550 doctors to communities and rural areas where there had been a lack of adequate medical care.

To move along to another side of the picture in rural areas, a way has been opened for the medical profession to place on record the full extent of its participation in caring for the needy of rural Missouri. I refer to the important projected survey to determine the sources and the extent of medical care being received by rural medical indigents. In thirteen of the twenty-seven counties to be studied, doctors will be asked to provide information on the amount of care they give rural indigents. A six-month-long pilot study was begun in Cooper County on the first of February. Your Association has offered its full cooperation in the entire survey which is sponsored by the Missouri Health Council. The University of Missouri's Institute of Research in the Social Sciences will undertake the actual collection of data for the Health Council.

Before concluding my remarks, here, very briefly outlined, are several other points I should like to add to this summary of a year of major accomplishment for your Association:

We continued our program of extending advice and counsel to communities in need of improved hospital facilities.

Your Association continued to offer valuable assistance to county societies in the development and planning of better and better scientific meetings.

This was another year of full cooperation with the State Division of Health and with its very able director, Dr. James R. Amos. The Association can be proud of its long record of cooperation with this important state office in helping to foster the extension of state wide programs in the interest of preventive medicine, public health education and maternal and child care.

We can also take pride in the support we have given the four-year school of medicine of the University of Missouri during the past year. From the very beginning our single concern has been for the success of the school. While the majority of us felt its chances of success would be better if it were located in one of our larger metropolitan areas, our aim has always been—and continues to be—to help in any way we can to make the school one of the nation's very best.

I should like to close by repeating what I said at the very outset of this talk. Though I am deeply grateful for having been given the honor to present this report, it is not mine. It is another man's. It reflects great honor on him and on the Council, committee members, officers and staff with whom he worked. I also want to say again that I have tried to cover only some of the highlights of this very successful year for your Association. I do not exaggerate in saying that had I tried to present to you all of the accomplishments of the year, this report would have been burdensomely long.

I know all of you join me in wishing Dr. Petersen the very greatest success in the year ahead.

The Speaker referred the President's Message to the Reference Committee on Reports of Officers.

Harold E. Petersen, M.D., St. Joseph, gave the Recommendations of the President-Elect as follows:

RECOMMENDATIONS OF THE PRESIDENT-ELECT

Mr. Speaker, Members of the House of Delegates of the Missouri State Medical Association and guests: It is with a great feeling of humility that I bring you this message and with a prayer for guidance for this coming year.

In all the time I have served as a Councilor, and more recently, as an officer of our association, I don't believe I have ever seen a year more filled with important decisions than the year that has passed since the last meeting of this House of Delegates. I can report to you that your officers, your Councilors and the chairmen of your standing and special committees have worked very hard during the year. The net of their work—in the form of concrete recommendations—will be presented to you at this meeting for your study and action.

It is not my purpose here to anticipate the matters that will come before you in proper order in the course of the session. I do wish, however, to begin this talk by stating as emphatically as I know how that certain of the matters you will be called upon to decide are matters of the very gravest importance. They will demand from you the most earnest and thoughtful consideration. It is not too much to say that certain of the decisions you make here at this 96th annual session of our association will have a continuing and important meaning for the members of our profession and for the people of Missouri for generations.

There are two problems in particular that I believe have a special importance for us. The first is a national problem, and, as such, is not one for which we in Missouri can take final responsibility. The matter is, however, so serious in its long term implications that it merits our most earnest attention. I am referring to the policy of the federal government and the Veterans' Administration in regard to the medical care of former service men.

Under present law and administrative practice, the Veterans Administration could easily become the first substantial beach-head of socialized medicine in America. There are at present twenty million veterans. Every year sees this number increased. If the need for the draft continues, it is not improbable that sooner or later nearly every male citizen will be a veteran of military service. If every one of these persons is to have the effective right—as he has at present—to free medical care in a veterans' hospital—if treatment for illness or disability that has no connection with military service is to be provided free by the federal government—it is easy to anticipate a major and revolutionary change in the practice of American medicine.

To be sure, the present rule requires a veteran to sign a statement that he is unable to pay for private care—the VA hospital facilities are provided for non-service-connected treatment only to the extent that beds are available. But the fact is that, under present law and present practice, the idea is becoming firmly fixed in the public mind that free care for all medical needs is the right of every veteran. It is not a long step to extend this kind of thinking to take in the dependents of veterans—and then the full foundation for national and socialized medicine would be laid.

I understand that a resolution on this matter is to be brought before you. You are, I know, aware that the A.M.A. has taken a strong position on VA care and is advocating a change in the law. You are also, I suspect, aware that there are very strong differences of public opinion on the issue. The American Legion is opposing any change in the present law.

The position of M.S.M.A., it seems to me, ought to be at once a patriotic and a realistic position. Certainly, no one of us would argue for a minute that our national government does not have the most binding and compelling obligation to care for those illnesses and injuries that fighting men have suffered as a result of their military duty. At the same time, however, when everyone, or nearly everyone, is to be a veteran, it becomes absurd to treat veterans as a class of citizens distinct from the rest of society.

A man's military service to his country cannot relieve him of his civilian responsibility to care for himself and for his family. If it should, then a society made up overwhelmingly of veterans would have to be a socialist society. Everybody would have the right to expect the state to care for him—and not only in the field of medical service but in all fields.

The importance of this big subject—not only to our profession, but to the whole American community—is obvious. I shall say nothing further on it here except to ask your serious attention to the resolution that will be introduced.

The second problem to which I wish especially to invite your attention during this session is closer to home. It is a problem with its roots deep in the history of Missouri. It is a problem that needs solution at the state level. It is, indeed, a problem that cannot be solved at any other level. It is a problem that has long plagued the medical profession of this state. It has long been one of the most serious problems affecting the health and welfare of the people of Missouri.

I refer to the problem of medical licensure—the matter of setting up and enforcing standards of competency for all those who are to be authorized by the state to care for the sick of Missouri. For generations we have lived with it. Years ago, a partial solution was found when the allopathic doctors of medicine took into their professional community the homeopaths. But the roots of the problem remained. This House of Delegates a year ago gave what amounted to a mandate to the Council to seek a solution to this problem. Never until now has there, to my knowledge, been a serious, radical proposal to solve the problem once and for all—to solve it in a way that will prevent its recurrence.

May I take a few minutes to consider the historical background. The most important fact to keep in mind is the relatively short time—measured in generations—in which there has been universal recognition of what medical science really is.

Before the great work of pioneering physicians and scientists that has taken place in the last one hundred years—before we knew as a matter of demonstrated truth what we know today about the nature of illness—it was possible for reasonable men to believe that there could be more than one kind of approach to the care of the sick. Only a few generations ago, it was possible to believe, as the inventors of numerous systems and theories and quackeries did believe, that some single magic key—such as the right adjustment of the spine or a vegetarian diet—could unlock the whole secret of nature, and that possession of this key was all that was needed to keep men well or make them well again in illness.

Such a theory, I repeat, was not beyond the limit of rational possibility a few generations ago. Both within and without the medical profession, there were in those days many who were looking for a key like this—a magical short-cut to health. And it was in such an intellectual atmosphere that the statutes of many of our states regarding the licensure of practitioners of the healing arts were written.

Of these statutes, those of Missouri are a typical example. They are based on the idea that there may be some sense in a short-cut theory of health, in the possibility of a panacea, in the possibility that a new cult may one day put its finger on essential truth. Being based on this kind of thinking, these statutes of ours provide for the state's licensing various kinds of physicians to do different things in the care of patients—different things related to the particular theory held by the school of practice involved.

The statutes, in other words, are based on the assumption that medical science is not a true science. They are based on the assumption that there is legitimate room for the eccentric new approach to healing. They are based on the idea that at any time someone may come along with a fresh idea, may start a school and may get his graduates licensed to care for the sick in accordance with his brand new theory.

In other words, our statutes continue to this day to be an open invitation to the fostering of new cults. We in Missouri have seen the history of such developments. All of us have lived with the consequences of this history. Many Missourians have died from them.

The fact is, of course, that medical science is now universally recognized as the only approach to research and to care. The history of the past one hundred years has abundantly proved that there is only one way to go about being a doctor and that is the way of long, hard study in the disciplines of experimental science, in learning the results of prior scientific investigators, in taking part in the endless process of learning new knowledge, in the mastery of scientific methods, in the actual clinical attendance on sick people.

The whole civilized world knows today that there is only one kind of medical science. And yet the statutes of Missouri still permit not only the possibility but the actuality of the licensing of persons to care for the sick who have no qualifications whatever, as qualifications are measured by the strict criteria of scientific training.

And this brings us squarely up against the problem. Do not the people of this state have a right to expect that any practitioner licensed by Missouri shall be a fit person to care for the sick? Do they not have the right to expect that the public authorities shall see to it that no unqualified persons shall be admitted to practice the healing arts? Do they not have the right to expect that anyone who sets himself forth to be a doctor in this state shall be competent to diagnose and treat or refer for treatment the illnesses that come before him?

What is the possible justification—at this time in the history of medical knowledge and of science—for allowing practitioners without even minimum qualifications to set themselves up as doctors? What is the possible justification for having several sets of standards, several licensing bodies, several levels of competence among those who are to be permitted to care for the sick? How can we justify a system which permits dangerous ignorance to prescribe health care and leaves it to the private judgment of the individual citizen to keep himself from danger. If the state of Missouri licenses a man as a doctor, don't the people have the right to believe the man is, in all honesty, a doctor and capable of doing a doctor's job?

This is the problem. As I have said, a proposal will be brought before you for the solving of this problem. It is, in my judgment, one of the most important proposals any House of Delegates has ever considered. I urge you to act upon it with wisdom and with courage.

Let us remember, as we sit in this meeting, that this House of Delegates is the deliberative and legislative body of one of the great voluntary institutions of the State of Missouri. It is part of the greatness of America that the responsibility of choosing, the responsibility of deciding, is not exclusively in the hands of government. It is diffused through the people, through groups like MSMA, through voluntary associations of citizens seeking to improve the circumstances of this community.

And, as we deliberate here on this important issue, it is my hope that every delegate will feel his obligation is something more than the simple interest of his profession. It is not an exaggeration to say that this House is a legislative body responsible to all the people of Missouri in matters relating to health. Its deliberation and its decision should reflect this responsibility. We are here to solve a problem that is bigger than the professional interest of any group. We are here to make a decision and to take an initiative on behalf of all the people of Missouri.

If we do our job right, we shall go away from this session with the satisfaction of knowing that no selfishness, no narrowness kept us from fulfilling our obligation to the people of this state—not primarily for now or for the next few years, but for the long future. We shall have made the first great step toward assuring the people of our state of the competence of the physicians licensed to serve them.

This talk is growing longer than I intended. It is customary for an incoming president to say something of the program he recommends for the coming year. I have talked so far entirely about this present session. I have done so because our next year's program depends in large measure on the decisions of this House of Delegates.

Aside from the matters I have touched on, there are one or two general comments I wish to make about the program of the Association in the year ahead.

I am certain that I shall have the support and enthusiasm of all the many doctors whose work on the committees of the Association adds up to the real meaning of MSMA. I know I shall have the support and help of the officers, the Council and the staff. I know the membership throughout the state will continue in their loyal way to make the new year a good year.

In our organized undertakings I know we shall continue to support Blue Cross and Blue Shield plans and that we shall do our part to build their success as public service institutions. I am confident that the indigent care survey in rural Missouri will have the whole-hearted cooperation of the medical profession. I am certain our postgraduate programs through the state will continue to make their important contribution. I know we shall keep striving to do what we can to improve the distribution of doctors in rural Missouri. In this connection, it is my hope that the year ahead will see us making our fullest cooperative contribution to the successful development of the four-year medical school at the University of Missouri.

To sum it up, I know that this Association will continue to go forward on the course charted by my predecessors and by Councils and by House of Delegates over many years. I know everyone concerned will do his part to help realize our goals for the year.

And now, there is just one more word I want to say. This is a meeting of a medical association. We shall be discussing organization affairs. We shall be thinking in terms of medical society activity. But in the deepest and most important sense, few of the important goals we seek can be attained altogether by the action or program of an organization as such. The performance of the medical profession in Missouri is not the performance of this Association. It is, rather, the performance of every single doctor in the day-to-day conduct of his own practice.

It is my hope that we shall have a banner Association year. But it is my deeper hope that we shall all of us go home from this meeting with something like a new sense of dedication to our job of caring for sick people. I hope we shall also as individual doctors take, in the year ahead, a more interested personal part in the life of our communities. I hope, to put it simply, we shall all of us do our best to be both good doctors and good citizens.

It is easier for me to express that wish today, because, as I do so, I think of my predecessors in this president's office. I think of them with pride for my profession. In the coming year, I shall do my best to live up to the expectation you had when you named me to be their successor.

Thank you.

The Speaker referred the Recommendations of the President-Elect to the Reference Committee on Reports of Officers.

The report of the Secretary, E. Royse Bohrer, M.D., Jefferson City, follows:

REPORT OF THE SECRETARY

On December 31, 1953, the official membership of the Association was as follows:

Status of Membership

Number of Members, January 1, 1953	3,607
New Members	183
Reinstated	4
Total	3,794
Dropped	8
Deceased	89
Transferred	52
Resigned	16
Number of Members, December 31, 1953	3,629

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following officers:

Three Vice Presidents to fill the terms of Guy N. Magness, M.D., University City; Thomas E. Ferrell, Springfield; Frank R. Teachenor, M.D., Kansas City, deceased.

Two Delegates and corresponding Alternates to the American Medical Association to fill the vacanices created by the expiration on December 31, 1954, of the terms of A. S. Bristow, M.D., Princeton; Alternate, J. W. Shaw, Fayette; Delegate, Paul Baldwin, Kennett; Alternate, Julius Jensen, M.D., St. Louis County.

The terms (two years) of the Councilors of the odd numbered districts expire this year: Donald M. Dowell, M.D., Chillicothe, First District; R. O. Muether, M.D., St. Louis, Third District; J. Loren Washburn, M.D., Versailles, Fifth District; Victor B. Buhler, M.D., Kansas City, Seventh District; J. H. Summers, M.D., Lebanon, Ninth District. Delegates from these districts shall meet on or before the last day of the meeting and elect the Councilor for their District. The election shall be certified to the House of Delegates on a prescribed form which will be furnished. Lists of Delegates from the various districts will be available to the Councilors and may be checked for those present at the Session at the Registration Desk.

The session will convene for four days, beginning Sunday, April 4, at 10:30 a.m., with a session of the House of Delegates, and closing Wednesday afternoon, April 7. A session of the House of Delegates will be held Monday, April 5, at 4:00 p.m., and the final session of the House will convene at 1:30 p.m., on Wednesday, April 7.

The Annual Banquet in Honor of Past Presidents will be held on Tuesday evening, April 6, at 7:30 p.m., at Hotel Jefferson, at which the Rev. Fr. Paul C. Reinert, S.J., will speak on "Unanswered Questions in American Education."

E. ROYSE BOHRER, Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Executive Secretary, Mr. T. R. O'Brien, follows:

REPORT OF THE EXECUTIVE SECRETARY

The personnel of the office, Mr. Ray McIntyre, Miss Helen Penn, Mrs. Bertha Thomas, Mrs. Gloria Luecke, Miss Marie Schmoele and Mrs. Marguerite Harris, are devoted, loyal and most cooperative in their efforts to carry out the duties assigned to them. They merit a vote of thanks from all the members and I wish to sincerely thank them for their help to me.

The Committee on Scientific and Postgraduate Work has arranged an outstanding program for the Annual Session. An innovation this year will be wet clinics held at St. Louis and Washington University Schools of Medicine. Special transportation will be provided to take members to and from these meetings. Scientific and technical exhibits will be shown to present the latest information about procedures, drugs and apparatus now in use. Intermission periods are provided to visit these exhibits. Members are urged to visit these exhibits as the revenue received from them is most important in defraying the expenses of the Annual Session.

It seems unnecessary to mention here specific happenings of the year just concluded. The reports of the Council and standing and special committees bring to your attention some of the present and future problems. The Field Secretary, or I, or both of us, attend all meetings and have tried to carry out the duties as recommended.

Perhaps the efforts of the officers, Councilors and members of committees of the Association are not as well appreciated as they might be. These doctors, busy as they are with their normal pursuits, still take time from leisure periods to devote their attention to problems affecting the medical profession in general. I wish to thank them most sincerely for their guidance and help.

Tom R. O'Brien.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Treasurer, Carl F. Vohs, M.D., St. Louis, Follows:

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement of the Association for 1953 which appeared in the March Issue of Missouri Medicine. Since Delegates have had that issue of The Journal of the Missouri State Medical Association, the report is not repeated in these reports.

Carl F. Vohs, Treasurer.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Scientific and Postgraduate Work, Paul O. Hagemann, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON SCIENTIFIC AND POSTGRADUATE WORK

The Committee recommended, in its report last year, that greater effort be made to combine and coordinate medical meetings over the entire state. In numerous localities, in the outstate area, considerable progress was made during the last year in line with that recommendation. This was primarily brought about by a cooperative endeavor of the Missouri Academy of General Practice, a number of County Medical Societies and this Committee working through the Association's headquarters office. An arrangement was worked out with various county medical societies to have some of their regular scientific programs furnished under the auspices of the Missouri Academy of General Practice. In these cases those members of the Academy attending their county society meetings receive formal postgraduate credit toward the Academy requirements. This has meant that fewer separate scientific meetings for Academy members, to furnish formal postgraduate credit, have been necessary. Through this procedure at least one medical meeting each month has been eliminated in these areas. In addition the evidence shows larger attendances at the county society meetings at which scientific programs have been under the auspices of the Academy. Furthermore, these endeavors have not interfered with the autonomy and usual functions of the county medical societies. On the contrary, there are signs indicating that a revived interest has been created in such local societies.

Scientific program included a wet clinic at Wohl Auditorium, Washington University.

A wet clinic was held at Desloge Auditorium, St. Louis University.

In an effort to "get more folks into the act" the Ozarks Medical Society agreed to serve as a guinea pig. The scientific program for their dinner meeting at the State Tuberculosis Sanatorium, Mount Vernon, on December 8, 1953, was jointly arranged and sponsored by the Missouri Academy of General Practice, the Missouri Chapter of the American College of Chest Physicians, the Missouri Trudeau Society and this Committee. This program was presented as a panel discussion on "Chest Diseases" with a moderator and four discussants.

The success of these various jointly sponsored scientific programs prompts the Committee to recommend a further extension of the idea on the local county society level and, in addition, to a district level. There are other organizations not mentioned herein, such as the Cancer Society, the Heart Association and others which have expressed a desire to have a part in jointly sponsoring programs for physicians as well as lay groups. By including such organizations in developing and presenting scientific programs on the local and district levels it stands to reason that more funds can be made available, more publicity gained and more talent tapped for planning programs as well as for presenting the discussions. This idea, if carried out, should further cut down the number of medical meetings, increase the attendance at meetings and improve the quality of the programs.

Medical societies which had some of their scientific programs furnished by the Missouri Academy of General Practice during the year are: Semo, Marion-Ralls-Shelby, joint meetings of Pemiscot, Dunklin and Butler-Ripley-Wayne, Phelps-Crawford-Dent-Pulaski-Maries, West Central, Grand River, joint meetings of Henry, Johnson, Pettis and Saline, Lincoln-St. Charles, Mineral Area, Ozarks and the Tenth Councilor District. The Committee on its own initiative, at the request of some county societies, has furnished a good number of speakers.

A series of five postgraduate evening meetings were held at the University of Missouri during the fall and winter months. These sessions were sponsored jointly by the Medical School of the University of Missouri and the Missouri Academy of General Practice. Physicians in a radius of seventy-five miles of Columbia received individual notices of these meetings.

Two new hyphenated societies were chartered since the State Association's last Annual Meeting. They are West Central Missouri Medical Society which includes the counties of Bates, Cass, Cedar, St. Clair and Vernon, and the Butler-Ripley-Wayne County Medical Society. Since their organization these societies have been active, have had good programs well attended. This Committee recommends that careful consideration be given to the hyphenation of other small societies where practical.

The Committee expresses its thanks and appreciation to all those physicians who have appeared on the many scientific postgraduate programs held over the state.

The Committee has arranged a scientific program for the 1954 Annual Session which, it feels, will be of value to every member of the Association. The subjects are practical and speakers have been asked to make their presentations applicable to every day practice. On the program are eleven speakers from out of the state and twenty-two Missouri physicians, all well qualified in their particular fields. A departure in this year's program will be wet clinics on Tuesday afternoon at the two medical schools in St. Louis. Sections will be presented on Obstetrics, Pediatrics, Medicine and Surgery. Round table luncheons on Monday and Tuesday will provide additional discussion time. The Committee hopes that attendance at the scientific sessions will be high as it believes that it is a program which members cannot afford to miss.

PAUL O. HAGEMANN, Chairman,
RALPH R. COFFEY,
WM. P. MADDUX,
M. PINSON NEAL,
KENNETH GLOVER,
WALTER W. TILLMAN,
F. RICHARD CROUCH,
MAXWELL G. BERRY,
HAROLD J. BRUMM,
W. S. WEPPRICH,
ALPHONSE MCMAHON.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Publication, Vincent T. Williams, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLICATION

January 1, 1953, to December 31, 1953

The 50th volume of MISSOURI MEDICINE was completed with the December 1953 issue. During 1953 there were published forty-three scientific articles, eleven postgraduate reviews, one pathologic conference, eleven case reports, fifteen special articles, forty-four editorials, eleven "Fraternally Yours," eleven listings of meetings, eleven reports of the Field Secretary, ten organization activity articles, forty miscellaneous articles, eighty-two county society and Councilor District reports, three hundred seventy news items, one hundred fifty-eight new members, seventy obituaries, eleven President's Comments, eleven "Curiosa et Trivia," eleven guest editorials, eleven "Among Our G. P.'s," eleven "Capsule Clinics," four "Forty Years Ago," two "Missouri Medicine in Review," eleven "Our Auxiliary," eleven "What is Your Hobby, Doctor?," eleven "Crossroads Comment," nine articles on the Division of Health, eight articles on Blue Cross-Blue Shield, seventy-one items of "Others Say," twenty-eight "Readers Review," six "Your Patients Read," eight "Your Patients Hear and See," four "Letters to MISSOURI MEDICINE," thirty-nine book reviews. There were five hundred and seventy-eight reading pages and four hundred twenty-five advertising pages, including thirteen inserts, a total of nine hundred seventy-six pages.

Advertising in Missouri Medicine from January 1, 1953, to December 31, 1953, earned $19,967.30. Subscriptions of nonmembers amounted to $127.20, making $20,094.59 earned by the publication. The cost of production (printing and illustrations) was $21,550.58.

VINCENT T. WILLIAMS, Chairman,
R. O. MUETHER,
PAUL O. HAGEMANN,
M. D. OVERHOLSER,
JOHN P. FERGUSON.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Defense, C. E. Hyndman, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON DEFENSE

April 1, 1953, to April 1, 1954

Cases pending April 1, 1953	3
New cases during the year	0
Cases settled during the year	0
Cases pending April 1, 1954	3

C. E. HYNDMAN, Chairman,
O. B. ZEINERT,
L. P. FORGRAVE,
ROLAND S. KIEFFER,
JAMES H. ONEIL.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Public Policy and Public Relations, W. F. Francka, M.D., Hannibal, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND PUBLIC RELATIONS

Three members of this Committee, including the chairman, have served continuously on the special committee appointed by the Council to study the problem of standards for licensure in Missouri. The work of this special committee is embodied in the report of the Council. To a large extent the special committee took a major role in policy deliberation, in this regard assuming one of the functions of the standing committee.

Throughout the year, basic activities of public relations and public communication continued to be carried forward by our public relations agency under the direction of the chairman of the Committee and of the Executive Secretary.

The year saw the introduction of individual report letters prepared by each Councilor after each meeting of the Council for the information of constituent societies in his district. Purpose of the letter is to keep the membership more completely and currently informed of the deliberations of the Council.

The composition of the Committee on Public Policy and Public Relations has been re-examined by the Council, and a recommendation is being made to the House of Delegates that committee membership be changed to consist of one member from each Councilor District, plus the President and President-Elect of the society and one member of the Council, ex-officio.

It is believed this decentralization of committee membership will increase the effectiveness of organization for obtaining prompt and thorough dissemination of information widely throughout the state.

W. F. FRANCKA, Chairman,
E. C. BOHRER (deceased),
H. E. PETERSEN,
J. W. ALLEE,
JEROME I. SIMON.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

The report of the Committee on Medical Education and Hospitals, W. J. Ferguson, M.D., Sikeston, Chairman, being unpublished, was referred to the Reference Committee on Miscellaneous Affairs.

The Committee on Medical Education and Hospitals meet.

The report of the Committee on Cancer, E. C. Ernst, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON CANCER

At a recent meeting of the members of the Committee on Cancer with representatives of the State Health Department and members of the Scientific and Medical Committee of the Missouri Division of the American Cancer Society, the educational features, and especially the immediate and future probable service problems of the indigent cancer patient, were discussed and evaluated.

Although the lay and professional educational activities throughout the state are being expanded, the Committee recommends that the need for more direct participation by the profession in the scientific cancer programs of our local county medical societies should be given more energetic consideration by the statewide program committees.

The clinical care of the indigent cancer patient in many local rural communities might become a national compulsory program unless a more active state-wide voluntary diagnostic cancer project is activated under the supervision of the local medical professions. Those counties in which the economic situation is becoming increasingly unstable are certainly the most susceptible to direct government supervision.

The present indigent diagnostic cancer facilities in Missouri remain relatively limited by comparison with similar cancer service programs in other states.

This is no reflection upon the diagnostic clinical service rendered by the present cancer clinics in the larger cities, the Ellis Fischel State Cancer Hospital and the generous endowment created by the Geo. Barnard Estate for the clinical diagnosis and care of the indigent cancer patients at the Barnard Free Skin and Cancer Hospital. In 1949 more than 20,000 indigent patients obtained consultation in the outpatient clinic. Annual contributions by the American Cancer Society and State Health Departments have contributed generously to these cancer centers.

The Cancer Committee is cognizant of the probable future curtailment in the free clinical service for those indigent cancer patients who are unable to pay even reduced clinical rates throughout the seventy counties in the eastern half of the state when the Barnard Free Skin and Cancer Hospital moves from its present location and may change its policies when the affiliation with Washington University becomes effective.

The Committee was informed that the State Cancer Hospital is unable to supplement or enlarge its present clinical and hospital services in order to adequately serve, in addition, those counties in which the diagnostic cancer facilities might be reduced. However, a survey of the patients admitted for cancer diagnosis at the Ellis Fischel State Cancer Hospital indicates that 40 per cent of those transported to the hospital failed to show any signs or evidence of cancer. The Committee's recommendation to the Council is that professional education at the local county level, or some form of screening operation by local physicians on the basis of the accepted clinical and physical signs and symptoms, would indirectly increase the capacity of the major and better equipped cancer centers and hospitals.

In order to more accurately evaluate the requirements of future state wide cancer services and educational activities on a practical grass root basis, the Committee directed the preparation of a questionnaire for distribution to physicians interested in cancer in widely scattered sections of the state. The opinions expressed are briefed as follows:

(a) For several years the slogan that "every doctor's office should be made a cancer detection center" was discussed and the answers to this question suggested that an intense educational campaign inaugurated for physicians and laymen alike might stimulate added interest by the distribution of leaflets, bulletins and through the medium of radio programs.

(b) The majority of the answers to the question of preparing a simple questionnaire "cancer symptom blank," which could be answered by the layman with either "yes" or "no" was recommended by the Committee. In addition, suggestions were added that such a form which included past history and complaints would expedite the examination and save the physician and the patient time and might stimulate better cooperation. The distribution of such a form should be controlled by the local medical society provided such a program is approved by the Council of the Association. It was also suggested that such a symptom blank or form could be made available in the physician's waiting room.

(c) There was no uniform agreement as to how to increase the x-ray and clinical laboratory facilities in sparsely settled rural counties. Some of the members commented that 50 per cent of the suspected patients could be screened by careful physical studies without the more elaborate laboratory or x-ray facilities.

(d) With one exception, the Committee members favored the distribution through the local medical society of a physical symptom blank, or a clinical form guide outlining routine cancer detection procedures. Such a printed form could be prepared by a committee representing the various specialities.

(e) The Committee approved the plan of stimulating greater interest and cooperation with existing committees for postgraduate cancer instructions on the grass root level.

(f) The Committee was divided in reference to the question of "reporting cancer cases on a state wide level"—at least it was recommended that such a program should be deferred for later action.

(g) The question of indiscriminate furnishing by the American Cancer Society (Missouri Division) of transportation and hormone drugs was discouraged, but the expansion of cancer "loan closets" and "dressing units" should be continued for the indigent cancer patient whenever demanded by the local organization.

(h) Many suggestions and methods for developing a "local screening unit or procedure" in various parts of the state on the local county level, which might help to reduce the 40 per cent of non-cancer patients applying for admittance to the Ellis Fischel Cancer Hospital, were discussed. It was the opinion of several members of the Committee that a carefully performed preliminary screening on the basis of history, physical examination and early signs of cancer, would be helpful in the interest of the cancer patient and would be economically sound. Approximately 50 per cent of the non-cancerous applicants for the State Hospital by careful screening could be treated by their local physicians.

Edwin C. Ernst, Chairman,
Marvin Napper,
Thomas Martin,
Everett Sugarbaker,
E. Kip Robinson,
Jack E. Hill,
Frederick J. McCoy.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Medical Economics, A. P. Rowlette, M.D., Moberly, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee as a whole did not officially meet during the last year. The chairman, however, served on the Special Committee of the Council which is making a report on future legislation.

The Executive Office staff has secured considerable information regarding methods used in nearby states to provide medical care for indigent patients in hospitals affiliated with state operated medical schools. Since the new School of Medicine at the University of Missouri, as reported, will be ready for operation in September 1955, this information should be useful in any suggestions the Committee may make relative to medical and hospital care of indigent patients.

Methods for paying for hospital care of indigent patients in other states vary to a considerable extent; however, they follow these general patterns:

1. Appropriations by the state completely cover total costs.
2. Counties within the state pay for the hospitalization in full.
3. Patients' bills are paid in part by the state and in part by the counties.

It has been customary in the past to include in this Committee's report an analysis of enrollment and payments by the Blue Cross-Blue Shield Plans of the State.

St. Louis Blue Cross

Membership, December 31, 1952	815,943
Membership, December 31, 1953	824,101
Reserve per agreement, December 31, 1953	$8.16
Reserve per participant, December 31, 1953	$3.43
Number of cases hospitalized	124,721
Number of days hospitalized	878,971
Average days stay per year	7.0
Amount paid hospital during year	$10,608,748

Missouri Medical Service (Blue Shield)

Membership, December 31, 1952	335,904
Membership, December 31, 1953	372,077
Reserve per agreement, December 31, 1953	$5.82
Reserve per participant, December 31, 1953	$2.53
Number of cases paid for during year	59,889
Amount paid during year to participating physicians	$3,110,171

Kansas City Blue Cross

Membership, December 31, 1952	335,059
Membership, December 31, 1953	351,654
Reserve per agreement, December 31, 1953	$8.43
Reserve per participant, December 31, 1953	$3.83
Number of cases hospitalized	52,866
Number of days hospitalization	392,326
Average days stay for year	7.4
Amount paid hospitals during year	$5,215,889.55

Kansas City Blue Shield Surgical Medical Care

Membership, December 31, 1952	309,566
Membership, December 31, 1953	325,772
Reserve per agreement, December 31, 1953	$6.67
Reserve per participant, December 31, 1953	$3.03
Number of cases paid for during year	131,614
Amount paid to participating physicians during year	$3,353,013.58

A. P. Rowlette, Chairman,
E. Royse Bohrer,
C. T. Herbert,
Arthur B. Smith,
Charles R. Doyle.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Mental Health, Thomas Thale, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON MENTAL HEALTH

The Committee met in St. Louis on November 12, 1953, and took the following actions:

The Committee on Mental Health of the Missouri State Medical Association has considered the legal procedures involving H. B. 355, pending before the Missouri Supreme Court. The Committee is of the opinion that the legality of the act, in whole or in part, is outside the province of the Committee; however, mental health and the well being of citizens of this state afflicted with this malady definitely are of concern to the Committee and to the Association; therefore, the Committee recommends that a panel of members of the Committee or of other members of the Association be provided to serve in the capacity of "Amicus Curiae" relative to the pending Supreme Court proceedings involving H. B. 355; and that the members selected will provide any technical or scientific information to the Court regarding mental health in Missouri which may be desired; and that the members selected will provide such information without expense to the Court, or to any of the principals involved, or to the Association itself.

The State Senate appointed a committee to study the needs of the State Mental Hospitals composed of the following: Senators Spradling, Cape Girardeau; Noble, Kennett; Crain, St. Louis County; Linneman, St. Charles. The committee will meet in St. Louis, December 10, 11 and 12.

It was agreed that a letter should be written to the Senate Committee offering the services of the Committee on Mental Health of the Missouri State Medical Association to assist the Senate Committee in its efforts to improve the care and treatment of mentally sick persons in Missouri.

Dr. Henry Guhleman, Director of the Bureau of Mental Health of the State Division of Health, told the Committee of some of the problems of the Division of Health and explained how federal funds had been allocated to assist in the development of Child Guidance Clinics.

It was agreed that a letter be written to Dr. James R. Amos, Director of Health, State of Missouri, offering the services of the Committee in an advisory capacity to the Bureau of Mental Health.

The report of the Committee was referred to the Council which considered it at its meeting on December 5, 6, 1953, and it was approved as written.

Thomas Thale, Chairman,
E. F. Hoctor,
John M. Sartin,
E. H. Parsons,
G. Wilse Robinson, Jr.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Infant Care, Daniel B. Landau, M.D., Hannibal, Chairman, follows:

REPORT OF THE COMMITTEE ON INFANT CARE

The Committee on Infant Care met in Jefferson City on November 1, 1953, to consider the advisability of organized effort on the part of the Missouri State Medical Association in relation to School Health problems in this state.

Drs. Landau and Magness reported on their observations from attendance at the Fourth National Conference on Physicians and Schools sponsored by the American Medical Association at Highland Park, Illinois, September 30 to October 2, 1953. They expressed considerable satisfaction with the discussion of school health problems as presented at the Highland Park Conference.

Members of the Committee discussed various activities as regards school health services which their local medical societies have or are carrying on. It was quite evident from this discussion that many school health problems need more extensive consideration by the medical profession in Missouri. The Committee is well aware that the vast majority of such problems are local and will be solved on that level; however, it is felt that some over all direction, stimulation and suggestion from the state level may be quite helpful. Some questions on which school health administrators may want the advice and suggestion of the local medical society are: (1) standards for safety and sanitation; (2) health and medical supervision of school personnel; (3) standards for the school food service; (4) content of school health courses and the value of the teaching material used; (5) handling of medical emergencies in the school; (6) prevention and control of communicable diseases; (7) health counseling; (8) form and maintenance of health and medical records; (9) conduct of periodic physical checkups; (10) utilization of the time and services of the school physician; (11) use of consultants, especially for examination of handicapped or retarded children; (12) precautions and protective measures for play and physical education and in athletic programs; (13) provisions for meeting the needs of handicapped pupils; (14) qualifications of personnel used in health education; (15) method of regular medical examinations for all school personnel. Therefore the Committee begs to recommend to the Council of the State Association as follows:

1. That school health become an active continuous consideration of the Missouri State Medical Association.
2. That the province of considering school health problems be designated to a suitable Association committee.
3. That such committee be either the Infant Care Committee or a new standing committee be created for the charge.
   a. If the Infant Care Committee is charged with this added function, it is suggested that it be expanded, to possibly ten members.
   b. The present Infant Care Committee favors an expansion with the added responsibilities over the formation of a new School Health Committee.
4. That the State Medical Association take the lead in the near future in seeking a top level meeting with the Missouri Division of Health, the State Department of Education and the Missouri State Dental Association to discuss over-all school health problems and to suggest areas and means of cooperative action.

The report was referred to the Council at its meeting on December 5, 6, 1953, and it was approved as written.

Since the recommendations include a suggestion that the purpose and make-up of the Committee be changed, the Council recommended that the standing committee on Constitution and By-Laws bring the necessary changes to the attention of the House of Delegates at the 1954 Annual Session.

DANIEL B. LANDAU, Chairman,
R. J. LADRIERE,
E. J. SCHWARTZ,
GEORGE V. HERRMAN,
J. S. SENNOTT,
GUY N. MAGNESS,
JOSEPH CONRAD,
ROBERT H. HODGE,
W. E. HENRICKSON.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

The report of the Committee on Health and Public Instruction, A. W. McAlester, III, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee continued this year its established policy of showing a health education exhibit at the Missouri State Fair in Sedalia, August 22-30. The exhibit was secured from the Bureau of Scientific Exhibits of the American Medical Association and designated "You Can Reduce." The interest shown in this exhibit, by those attending this year's fair, was gratifying. A large quantity of pertinent literature on overweight was collected at the exhibit by the many visitors. Some requests have come into our State Association Headquarter's office, just recently, for additional quantities of certain pieces of literature which were displayed.

During the actual showing of the exhibit, official representatives of two County Fairs made known their desires of having the exhibit shown at their respective local fairs. This request points up a potential health education display vehicle which offers a means of reaching certain groups of people not now being effectively touched. Again this Committee invites the attention of County Medical Societies to the possibility of requesting Woman's Auxiliaries to consider developing and presenting health exhibits at county fairs.

This Committee has had the privilege of furnishing a number of speakers for meetings, sponsored by various Auxiliaries, during the year. Many of these meetings have been open to the public in the form of health forums or health day teas and luncheons. The Committee is pleased to note the growing number of County Medical Societies, and of Society Auxiliaries, who are promoting, in addition to public health forums, health education through sponsored radio and television programs. The Bureau of Health Education of the American Medical Association has available various series of good health education transcriptions for radio. These are adaptable for local use and can be borrowed from the American Medical Association without difficulty.

A. W. MCALESTER, III, Chairman,
J. EARL SMITH,
ROLLA B. WRAY,
GEORGE A. KELLING,
GUY V. EVERIST.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Constitution and By-laws, Durward G. Hall, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee has not met during the year. However, the Council referred to the Committee suggested By-law changes which had been recommended by the Committee on Infant Care and the Committee on Public Policy and Public Relations. These were sent to the members of the Committee by mail; however, replies were not received prior to publication of this booklet. The suggested By-law changes, as submitted, are:

1. Re Committee on Infant Care. Amend Chapter VII, Sec. 2, page 12, by striking out the following, "A Committee on Infant Care" and inserting in lieu thereof, the following, "A Committee on Infant and Child Care" so that the section will read: "Sec. 2. The standing committees, unless otherwise provided in these By-laws, shall consist of five members serving three year terms, and shall be:

"A Committee on Scientific and Postgraduate Work.
"A Committee on Publication.
"A Committee on Medical Defense.
"A Committee on Medical Education and Hospitals.
"A Committee on Medical Economics.
"A Committee on Cancer.
"A Committee on Public Policy and Public Relations.
"A Committee on Maternal Welfare.
"A Committee on Infant and Child Care.
" . . . "

Amend Chapter VII, Sec. 2, page 14, paragraph 3 by striking out all of paragraph 3, beginning with "The Committee on Infant Care" and ending with "State Division of Health," and inserting a new paragraph relating to the same subject, as follows:

"The Committee on Infant and Child Care shall consist of ten members, one from each of the ten Councilor Districts, appointed annually by the President. The Committee shall concern itself with the betterment of infant and child care and shall be a liaison with the Bureau of Child Hygiene of the State Division of Health. The Committee shall study and make recommendations regarding various public, private and parochial school health programs in this state."

2. Re Committee on Public Policy and Public Relations. Amend Chapter VII, Sec. 2, page 14, paragraph 1, by striking out all of paragraph 1, beginning with "The Committee on Public Policy" and ending with "and scientific medicine" and by inserting a new paragraph relating to the same subject and reading as follows:

"The Committee on Public Policy and Public Relations shall consist of ten members of the Association appointed by the President, one from each of the ten Councilor Districts; the President, and President-Elect of the Association and one elected member of the Council shall serve as ex officio members of the Committee. There shall be a joint meeting of this Committee and an auxiliary committee as provided for in Chapter XI, Sec. 10, of these By-laws, held annually, as may be ordered on the call of the chairman or six members of the Committee. The Chairman of the Committee, and in his absence the President, shall act as Chairman at the joint committee meetings. Under the direction of the State Committee, the joint committee shall concern itself with promoting good relations between the profession and the public, and in procuring public cooperation in the interests of public health and scientific medicine."

The Committee desires to bring to your attention the three amendments to the Constitution which were introduced at the last session. These amendments are lying on the table, having been published the required number of times in the Journal, and will be considered at our coming meeting. They are as follow:

Amend Article VII. Officers. Sec. 2, by deleting the period and adding the following words "and no Councilor may be reelected to serve more than three consecutive terms" and deleting the period and adding the following words "and may not be reelected to serve as officer or Councilor for more than six years" so that the section shall read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years and no Councilor may be reelected to serve more than three consecutive terms. The Secretary and Treasurer shall be elected by the Council and may not be reelected to serve as an officer or Councilor for more than six consecutive years. The delegates present from each Councilor District shall meet on the morning of the last day of the Annual Session and elect the Councilor from the district. In the event of death, resignation or removal of any Councilor, the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

Amend Article VII. Officers. Sec. 2, by deleting the words "The Secretary and the Treasurer shall be elected by the Council," so that the section shall read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years. Half of the membership of the Council shall be elected each year. The delegates present from each Councilor District shall meet on the morning of the last day of the Annual Session and elect the Councilor from that district. In the event of death, resignation or removal of any Councilor the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

Amend Article VII. Officers. Sec. 2, by deleting the words "shall meet on the morning of the last day" and insert in lieu thereof "shall meet prior to the last day" so that the section when amended will read: "Sec. 2. All officers except Councilors shall be elected annually. The terms of Councilors shall be two years. Half of the membership of the Council shall be elected each year. The Secretary and Treasurer shall be elected by the Council. The delegates present from each Councilor District shall meet prior to the last day of the Annual Session and elect the Councilor from that district. In the event of death, resignation or removal of any Councilor, the Council may appoint a successor to serve until the vacancy is filled at the next Annual Session. All of the officers shall serve until their successors are elected and installed."

The Committee will meet on Saturday afternoon, April 3, and any members or delegates who may desire to propose changes in the Constitution or By-laws are invited to attend the meeting.

Durward G. Hall, Chairman,
W. L. Allee,
Paul Baldwin,
Curtis H. Lohr,
H. M. Parker.

Dr. Hall: Mr. Speaker, the Association's Standing Committee on Constitution and By-laws has been working throughout the year by correspondence but only yesterday held its first actual meeting to review the work of the year and to reaffirm its decisions made through correspondence.

This particular Committee has worked consistently through several years, and you will recall, finally it was in office when the new Constitution and By-laws were adopted two years ago. Much credit is due the members whose considered opinion and mature judgment is well recognized.

The principal portion of the published report deals with actions which are on the table for action by this House of Delegates. They consist of three actions of yesteryear, as I said, lying on the table for definitive action by the House of Delegates. All pertain to the same Section and Article of the constitution, although presented by three different members in widely diverse areas of the state.

No. 1: The Standing Committee feels that the offices of Secretary and Treasurer are principally administrative offices, that the Council is the administrative body through the greatest part of the year and that the Council should appoint the Secretary and Treasurer, selecting the most suitable administrative persons for these offices. Therefore, the Committee recommends to this House of Delegates that it disapprove the amendment to Article VII, Section 2, entitled "Officers."

No. 2: The Committee, after discussing this matter at the meeting and following correspondence through the year, feels that the terms of Councilors should be left to the individual Councilor Districts. That predicated on a local option basis and democratic process, the House of Delegates should not dictate to the individual Councilor Districts what they should do in considering terms of service of their representatives in the executive body of the Association. Therefore, the Standing Committee suggests to the House of Delegates that it not accept the amendment to limit the terms of office of the Councilors.

No. 3: Your Standing Committee approves the third amendment to the Constitution, with the suggestion that the phrase "On or before the last day" be substituted for "prior to," in the interest of consistency between the Constitution and By-laws.

In addition, there are two amendments to the By-laws, the other three having been referrable to the Constitution. These amendments to the By-laws given in the printed report were approved by the Council and referred to this Committee for introduction to the House of Delegates. This Committee recommends to the proper reference Committee as you will designate that the Committee on Infant Care become the Committee on Infant and Child Care, with the change in duties of the Committee as given in the suggested By-law. Also that the Committee on Public Policy and Public Relations be enlarged and its duties enlarged in a more representative fashion as outlined, throughout all Councilor Districts. The Committee does suggest that for clarification the word "annually" be inserted as now printed in the report so there will be no doubt that the meaning is that the President shall appoint this Committee each year.

Now, your Committee has considered many possibilities of improvement and changes in the new Constitution and By-laws, some of which have been specific, but it was felt that this session of the House has much to consider and its time will be fully occupied with matters more pertinent than any unimperatively needed changes.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-laws.

An informal conference.

The report of the Committee on Conservation of Eyesight, C. Souter Smith, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSERVATION OF EYESIGHT

The Committee on Conservation of Eyesight of the Missouri State Medical Association met in Jefferson City at the Missouri Hotel on January 31, 1954. Those present were Dr. C. Souter Smith, Dr. W. L. Post, Dr. C. H. Brady and Dr. D. E. Eggleston, members of the Committee, and Mrs. Lee Johnston, Chief of the Missouri Bureau for the Blind.

The Committee discussed the draft of the proposed licensing act for ophthalmic dispensers which is being promoted by the opticians of the State of Missouri, and approved it in principle but wished to refer it to the Council of the Missouri State Medical Association for legal advice.

The officers confer.

A discussion was held on the subject of vision testing in the public schools of the state and it was the consensus of opinion of the Committee that an approach should be made to the State President of the Parent-Teachers Association, sending a brochure on vision testing and suggesting that the PTA organization look into the program of school vision testing in communities which do not have a school health nurse, and which want to start a vision testing program. Brochures on vision testing could be furnished by the Committee on Conservation of Eyesight.

The Committee went on record as being opposed to the sale of fireworks in the state because of the great number of eye accidents which are caused by them. In attempting to get legislation, the Committee recommends that cooperation be solicited from the Lions Clubs of the state and from the National Safety Council.

The Committee approved sponsoring an exhibit at the Annual Session of the Association if it is found to be possible and practical.

C. Souter Smith, Chairman,
Robert D. Mattis,
W. L. Post,
A. N. Lemoine,
H. B. Stauffacher,
John McLeod,
G. T. Tygett,
George Hornback,
C. H. Brady,
Theodore E. Sanders,
D. E. Eggleston.

The Speaker referred this report to the Council.

The report of the Committee on Control of Venereal Disease, E. M. Cannon, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON CONTROL OF VENEREAL DISEASE

A meeting of the Committee took place January 13, 1954 in Jefferson City. The following were present: Drs. A. W. Neilson, St. Louis; Charles C. Dennie, Kansas City; James C. Cope, Columbia; James R. Amos, Director, Division of Health, Jefferson City; E. A. Belden, Bureau of Communicable Diseases, Division of

Health, Jefferson City; E. M. Cannon, St. Louis, and Mr. T. R. O'Brien, Executive Secretary, Missouri State Medical Association, St. Louis.

The Division of Health reported and the Committee discussed the fee for service plan for venereal disease cases which has been in existence since the Midwestern Medical Center was closed on June 30, 1952. The plan has operated successfully since that time. Approximately $3,200 was expended by the Division of Health from July 1, 1953, through December 31, 1953, for fees to physicians who treated indigent venereal disease patients. In this six month period, 103 cases of syphilis and 113 cases of gonorrhea were treated by 180 physicians. Dr. Belden reported that there will be a reduction in federal funds for the next fiscal year and that the plan may have to be curtailed to pay physicians only for cases of gonorrhea, primary and secondary syphilis and possibly early latent syphilis. On motion, duly seconded, it was unanimously agreed to continue the programs and that the Division of Health be asked to appropriate the necessary funds to continue operation.

The Physicians Confidential Venereal Disease Morbidity Report form was discussed. It was brought out that the form needs simplification and revision because certain drugs listed are no longer used in the treatment of venereal disease. It was agreed that a new form be developed after the present supply is used.

It was recommended that members of the Committee and other physicians interested in venereal disease control be invited to address medical society meetings from time to time to bring to the assembled physicians modern concepts in diagnosis and treatment of venereal disease. The Committee expects to prepare scientific articles on venereal diseases for publication in the Missouri Medicine.

The regulation of the Division of Health regarding the reporting of venereal disease was discussed. Although the incidence of venereal disease has declined steadily nationally and locally since the advent of penicillin, it is believed that the lack of reporting has distorted to some extent the true picture. The regulations of the Missouri Public Health Manual call for reporting by an approved laboratory, private or otherwise, whenever a test proves to be positive. The laboratories have not reported such cases and have objected to such reporting on the basis that these patients are not their patients and the reporting should be done by the referring physician.

The Committee appeals to the laboratories to report at least the number of separate, unduplicated cases of positive serology, so as to help the Committee answer the following questions:

1. Has syphilis decreased as much as is thought?
2. Is penicillin treatment as effective as it is thought it is?
3. Is contact investigation as important as it is thought it is?

The Committee, on motion, duly seconded, adopted the following resolution: "That all approved private and hospital laboratories report all separate and unduplicated cases of positive serology to the Chairman of the Venereal Disease Control Committee."

During the last year, Dr. A. W. Neilson presented an exhibit on "Syphilis" at the meeting of the American Academy of General Practice held in St. Louis, March 23-26, 1953, and at the Missouri State Medical Association meeting held in Kansas City, April 26-29, 1953. On color television at the American Medical Association Meeting held in St. Louis, December 1-4, 1953, the following subjects were presented to physicians attending:

A. W. Neilson, M.D., St. Louis—"Modern Trends of Venereal Disease Control."

E. M. Cannon, M.D., St. Louis—"Control and Management of Gonorrhea."

The Committee wishes to thank Dr. E. A. Belden and Mr. John Hove of the Division of Health for their wholehearted cooperation in assisting the Committee.

The report was considered by the Council at its meeting on February 7, 1954. The portion of the report dealing with the reporting of positive venereal disease cases by private laboratories to the State Division of Health was referred by the Council to the Committee on Laboratory Medicine.

E. M. Cannon, Chairman,
A. W. Neilson,
J. G. Siceluff,
Charles C. Dennie,
James C. Cope,
E. J. Murphy.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Industrial Health, H. M. Roebber, M.D., Bonne Terre, Chairman, follows:

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

The gradual development of health programs for industry has brought with it a great need for physicians to direct and guide these programs. It has been reported that there are openings for four thousand full time physicians in industrial plants and that many thousand additional physicians are needed on a part time basis.

Many of the medical schools have graduate and postgraduate courses in various phases of industrial medicine and it is the hope of this Committee that the schools in this state install such programs in their curricula.

Labor unions are sponsoring industrial health programs not only for the employee but also his family. These programs are being worked out by joint committees of management and labor in the form of fringe benefits. The Council of Industrial Health of the American Medical Association conducted a survey of "Union Health Centers" and published a report in September 1953. Copies may be obtained by writing to the American Medical Association.

No specific problems have been presented to the Committee during the last year by the Bureau of Industrial Hygiene of the State Division of Health. The Committee, however, stands ready to assist the Bureau whenever needed.

The Committee was asked to assist the Industrial Award Committee of the U. S. Department of Labor in selecting a physician in Missouri who had rendered outstanding service in the betterment of conditions for the physically handicapped worker. The request was received too late for action by the Committee.

H. M. Roebber, Chairman,
Vencel W. Hollo,
F. L. Feierabend,
V. T. Williams,
S. W. Scorse.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Anesthesiology, R. M. S. Barrett, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON ANESTHESIOLOGY

The Committee on Anesthesiology is prepared to be of assistance to the Association and its members in any of the following fields:

1. The placement of physicians in the specialty throughout the state.
2. Help to the general practitioner who is doing part-time anesthesiology.
3. Aid for emergency consultation.
4. Aid in medico-legal problems of the specialty.
5. The establishment of public relations.

6. Liaison between Blue Cross, Blue Shield and insurance companies providing anesthesia benefits to their subscribers.
7. Advice to the Engineering Department of the State Division of Health in the construction of hospitals; providing technical information in constructing operating rooms in hospitals, the storage of anesthesia gas tanks and explosion precautions.

The Chairman is serving on a special committee of the Blue Shield plan. The duties of the special committee are to furnish recommendations for increased benefits in anesthesiology, pathology and roentgenology. The advice of other members of this Committee, and of the Missouri Society, have been obtained through several informal meetings, and by the exchange of letters.

R. M. S. Barrett, Chairman,
Carl K. Ness,
Joseph A. McNearney,
Merritt H. Kimball,
O. B. Crawford.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

Paul N. Johnstone, M.D., Kansas City, reported for the Committee on Hospital and Professional Relations but asked that any action by the Association await agreement on a report of the joint Conference for the Improvement of the Care of the Patient.

The report of the Committee on Physical Medicine, Sedgwick Mead, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PHYSICAL MEDICINE

The Committee on Physical Medicine did not meet formally during the last year. The chairman, however, has served on the special committee of the Council dealing with future legislation at the state level. A report of that special committee is to be presented to the House of Delegates.

The past session of the Missouri General Assembly considered five bills dealing with chiropractic and naturopathy. Two of these, involving chiropractic, were introduced in the Senate and were not approved by the Committee. Three bills dealing with Naturopathy were introduced in the House. These bills created a Board of Examiners to license applicants to practice Naturopathy. Two of the bills were defeated in Committee and the third, though approved by the Committee, was withdrawn by the author after adoption of an amendment which authorized the appointment of doctors of medicine, rather than naturopaths, to examine the applicants.

The chairman attended the committee hearings in the Senate and House. The President of the Association, Dr. J. W. Thompson, and the Secretary, Dr. E. R. Bohrer, and the chairman spoke in opposition to these legislative acts in the Senate and House of Representatives.

It is anticipated that future legislation may be necessary to license persons who are properly qualified in the field of physical therapy. The Missouri Branch of the American Physical Therapy Association has been studying the need for such legislation and this Committee will carefully consider and make recommendations regarding it at a later time.

The Missouri Branch of the American Physical Therapy Association will hold its Third Annual Meeting at Hotel Jefferson, St. Louis, April 4, 5, 1954, in conjunction with the Missouri State Medical Association Annual Session.

Sedgwick Mead, Chairman,
C. Stewart Gillmor,
R. A. Ritter,
Luke A. Knese.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Alcoholism, Ralph E. Duncan, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON ALCOHOLISM

The activities of this Committee and its members since the 1953 session of the Association have been as follows:

Legal Aspects

Soon after the close of the Association's 1953 Session at Kansas City, Smith and Duncan, members of the Committee, James R. Amos, Director of Health for the State of Missouri, and representatives from other professional and lay groups met in the Capitol at Jefferson City with the House of Representatives' Committee on Public Health and Welfare to discuss the merits of House Bill No. 255 introduced by Representative Brown of Springfield. This bill was described as "An Act—To provide for the study, care, treatment and rehabilitation of persons addicted to the chronic and habitual use of alcohol and to provide for the establishment and operation of hospital and clinical facilities for such care and treatment."

There was no one present at the committee meeting opposing the passage of the Bill. The members of the committee expressed keen interest in the objects of the bill and recommended its passage. The House did pass it. The bill went to the senate and was referred to the Judiciary Committee. Unfortunately, only Smith of the Committee could, because of other appointments, be present at the Judiciary Committee hearing on this bill. The Chairman of this Committee requested Edward R. Bohrer, Jefferson City, to attend the hearing and discuss the merits of the Bill; this he did and the Committee is grateful for his assistance. Unfortunately, the Bill was not reported out of the Judiciary Committee of the Senate prior to adjournment of the 67th General Assembly.

The members of the Committee now believe that since the Missouri University Medical School has been established on a four year basis at Columbia and that Columbia's location is central for the state, a bill should be prepared to provide for a special hospital for the care and treatment of the chronically ill and that as long as a need exists for the study and treatment of persons addicted to the use of alcohol they shall receive primary consideration.

Education and Propaganda

Smith of the Committee has been the principal guiding hand in stimulating interest and action among nonmedical groups. Smith has promoted, through the Missouri Committee for Education on Alcoholism, programs with members of several church groups and interested several high school and college educators in the subject. Recently the Chairman of the Committee contacted the Supervisor of Secondary Education at the Department of Education of the State of Missouri and found that it would be possible for the Committee to be of material assistance in furnishing basic data to be included in a manual for the conduct of elementary schools that is now being prepared by the Department of Education and provides for a section on tobacco, alcohol, tea, coffee.

The laws of Missouri require: "Instruction in physiology and hygiene. Physiology and hygiene, including their several branches, with special instructions as to tuberculosis, its nature, causes and prevention, and the effect of alcoholic drinks, narcotics and simulants on the human system, shall constitute a part of the course of instruction, and be taught in all schools supported wholly or in part by public money under state control."

The Chairman of the Committee, with the aid of members of the Jackson County Medical Society's

Committee on Alcoholism, prepared an exhibit for the Thirty-first Fall Conference of the Kansas City Southwest Clinical Society, September 28 through October 1, 1953, at the Municipal Auditorium, Kansas City. This exhibit interested many attending the Conference and it was awarded second prize for organizational exhibits. The committee on awards was composed of guest speakers, namely, John V. Goode, Dallas, Texas; Francis D. Murphy, Milwaukee, Wisconsin, and Stanly P. Reiman, Philadelphia, Pennsylvania.

The Chairman, when in Geneva, Switzerland, during the last summer consulted with E. M. Jellinek, Sc.D., Consultant on Alcoholism for the World Health Organization, at the Palais de Nationa for the purpose of obtaining the most recent information in reference to effective educational programs and where notable research work was being done on alcoholism. Jellinek furnished for the Committee, technical reports prepared by the Alcoholic Subcommittee to Mental Health Committee of the World Health Organization.

The "Chart of Alcohol Addiction" was reproduced from World Health Organization Technical Report Number 48 and distributed at the Jackson County Medical Society's exhibit with the Kansas City Southwest Clinical Society's Conference last fall. This chart was found so interesting to those who studied it, they requested additional copies for use in teaching groups on the subject of alcoholism. The cost of reproducing the Chart was sponsored by The Ralph Foundation for Medical Research, Kansas City.

Jellinek said he was much impressed by the research work that was being done at the Burden Neurological Institute, Bristol, England, and recommended that the Committee avail themselves with a subscription to the *British Journal of Addiction* in which journal the research reports are published. Subscription has been made.

Recently, January 21, 1954, the Chairman was privileged to serve as Master of Ceremonies at a complimentary dinner meeting held at the Muehlebach Hotel, Kansas City, for all members of the Jackson County Medical Society and their wives to hear Rev. John C. Ford, Boston, discuss the problem of alcohol. Father Ford is an outstanding Catholic educator and has written considerable on alcohol. The dinner meeting was well attended and the interest since evaluated has been good. Father Maurice E. Van Ackeren, President of Rockhurst College, Kansas City, and Rockhurst College sponsored the dinner. The Committee believes that this type of an assembly meeting is good and recommends that other groups interested in the furtherance of the welfare of mankind sponsor similar meetings.

Annual Committee Meeting

It has been the policy to keep in touch with one another through letters and telephone conversations and have few meetings of the Committee, but at least one annual meeting to review the work done and recommend future work programs. All members met December 2, 1953, 6:30 p.m. at the Jefferson Hotel, St. Louis, and invited the following distinguished guests: G. A. Sullivan, M.D., Keeley Institute, Dwight, Illinois; Herman A. Heise, M.D., Milwaukee, Wisconsin, member of the Medical Legal Board of the American Medical Association; Mr. Robert G. Small of the National Safety Council Headquarters, Chicago, Illinois, and Nathan Blackman, Malcolm Bliss Hospital, St. Louis.

A review of accomplishments was presented by members and the following phases discussed: Tax supported alcohol programs, alcoholism in industry, activity program for 1954-55 and the proposition that a special hospital be provided by the state and attached to the Missouri University Medical Center at Columbia to serve as a research and clinical center for the study and care of alcoholic patients, this center to be operated by the Division of Mental Hygiene, Missouri State Department of Health in close relationship with the teaching and research activities of the University of Missouri Medical School.

A copy of the proceedings of this meeting is herewith attached, not for publication, but for ready reference in the files of the Association's Executive Office.

The Chairman desires to take this opportunity to express his appreciation for the fine cooperation of every member of the Committee, namely, Coffelt, Forman, Kendis and Smith not only for the sacrifices in time in attending the annual meeting, but for their contributions in ideas and participation in lay and professional programs on the subject of alcohol.

Recommendations

This Committee believes that its most valuable work must be educational and especially in high schools, universities and colleges. The Committee suggests that the Council recommend to the House of Delegates at this year's session of the Association to be held in St. Louis April 4 to 7, the following:

1. That the aims of the Committee, as outlined in their 1952 report and printed on page 28 of the "Report of Officers and Committees" for 1952, be reaffirmed by the Association.
2. That the Committee on Alcoholism be instructed to formulate and promote, with the assistance of the Association's Executive Office and its officers, necessary legislation that will provide for a special hospital for the chronically ill to be located at Columbia in close relationship with the teaching and research activities of the University of Missouri Medical School which will principally serve as a research and clinical center for the study and care of alcoholic patients.
3. That the Committee on Alcoholism compile an informative report on Alcoholism in Missouri including the following:

Aspects of the Problem

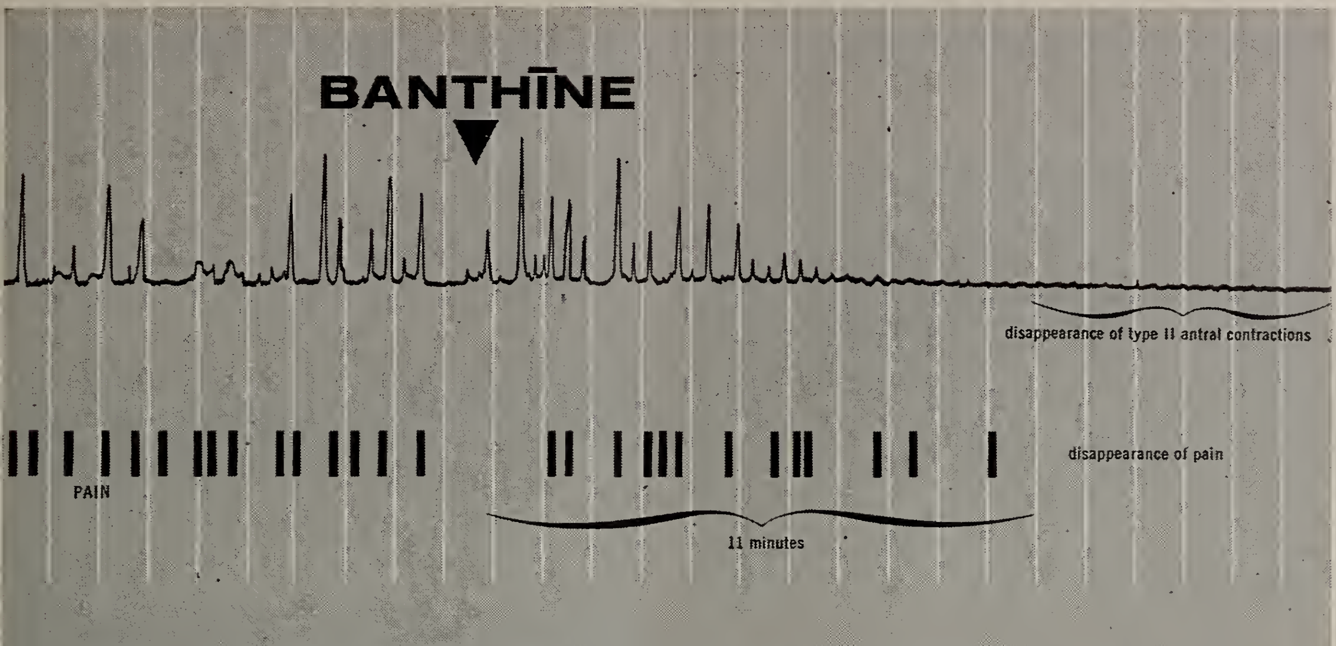
1. History of the use of alcohol.
2. Brief survey of the industry-national and state production, revenue and taxes therefrom.
3. Economic loss and cost of alcoholism: (a) loss of wages, absenteeism, (b) cost of alcoholics' care in jails and hospitals.
4. Incidence of the role of alcoholism in: (a) fatal and nonfatal automobile accidents in the United States, state, counties and cities, (b) felonies, misdemeanors and asocial behavior.
5. Individual effects: (a) incidence of drinkers and addicts and development of alcoholic habits during adolescence, (b) deaths from alcoholism, (c) medical, physiologic and pathologic effects, (d) psychological and psychiatric results.

Treatment of the Problem

1. Legal control of the industry and sale of the product.
2. Activities of law enforcement agencies.
3. Medical aspects—treatment of the acute alcoholic and chronic drinker.
4. Public health aspects.
5. Organizations active in meeting the problem—religious, Women's Christian Temperance Union, Salvation Army, Alcoholics Anonymous, the Yale Study, local option proponents, lay groups and other social efforts.

Recommendations

1. Role of the physician in private practice in promoting the program, treating alcoholics and disseminating relevant knowledge.
2. Role of hospitals in provision of beds for acute cases.
3. Local medical services required: (a) hospital and diagnostic facilities, (b) rehabilitation services, (c) follow-up services, (d) coordination of medical, law enforcement and religious and other services.



Effect of 100 mg. of Banthīne administered orally on antral gastric motility and duodenal ulcer pain.[2]

Hightower, N. C., Jr., and Gambill, E. E.: Gastroenterology 23:*244* (*Feb.*) *1953*

Banthīne® Reduces Hypermotility and Hyperacidity in Peptic Ulcer

A recent evaluation of anticholinergic therapy in peptic ulcer emphasizes the fact that now the profession has at its disposal agents that are "effective in reducing both secretory and motor activity of the stomach."

The effect on motor activity is generally more pronounced and less variable than on secretion; pain relief is usually prompt; a high degree of effectiveness is noted in ambulatory ulcer patients.

Ruffin, J. M.; Texter, E. C., Jr.; Carter, D. D., and Baylin, G. J.: J.A.M.A. 153:*1159* (*Nov. 28*) *1953.*

With its proved anticholinergic effectiveness, Banthine has been found extremely useful in the medical management of active peptic ulcer, whether duodenal, gastric or marginal.

The immediate increase in subjective well-being and the simplicity of the Banthine regimen assures patient cooperation. The recommended initial therapeutic dose is 50 or 100 mg. (one or two tablets) every six hours around the clock, with subsequent individual adjustment. The usual measures of diet regulation, rest and relaxation should be followed.

Banthine is effective in other conditions caused by excess parasympathetic stimulation. These include hypertrophic gastritis, acute and chronic pancreatitis, biliary dyskinesia and hyperhidrosis. Banthine is contraindicated in the presence of glaucoma and should be used with caution in the presence of severe cardiac disease or prostatic hypertrophy.

Banthine® bromide (brand of methantheline bromide) is supplied in scored tablets of 50 mg. and in ampuls of 50 mg. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

4. Educational services: (a) physicians, (b) auxiliary medical personnel, (c) law enforcement personnel, (d) public: general, adolescent and teen-age group and elementary schools.
5. Research activities.
6. Implementation of the organized program: (a) state commission, (b) state hospitals, (c) local commissions.
7. Financing the program.
8. Conclusions for publication in Missouri Medicine, Journal of the Missouri State Medical Association, to be available for ready reference and basic material for all groups interested in the subject, including the State of Missouri Department of Education.
9. That the Committee on Alcoholism be continued.

Ralph Emerson Duncan, Chairman,
Kenneth C. Cofelt,
George W. Forman,
Joseph B. Kendis,
Stephen D. Smith.

The Speaker referred the report on the work of the Committee to the Reference Committee on Miscellaneous Affairs and the Recommendations of the Committee to the Council.

The report of the Committee on Study of Cardiac Diseases, E. Lee Shrader, M.D., St. Louis, Chairman, being unpublished, was referred to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Rural Medical Service, A. E. Spelman, M.D., Smithville, Chairman, follows:

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The Committee has given considerable thought and some investigation to a number of important rural health matters which exist as problems in varying degrees over the entire state. On August 9, 1953, the Committee met formally, in Jefferson City, to crystallize some of its thinking, review reports of rural health activities, past and present, and to consider and plan for constructive future Committee activity Some of the Committee's thinking along with certain recommendations and suggestions are respectively submitted as follows:

Results indicate that the hyphenations of small county medical societies over the state offer a sound means of strengthening organized medicine in the rural areas by effecting increased society meeting attendance, better scientific programs and additional desirable social and professional relationships between more doctors.

The idea of having some of the scientific programs of county medical society meetings furnished by the Missouri Academy of General Practice has proven sound. This procedure has helped to eliminate too many medical meetings and at the same time has helped in promoting increased attendances and better programs in many instances.

This Committee is aware of the numerous opportunities offered most physicians today to assume leadership in local health matters and to guide cooperative endeavors in community health projects. Approximately one half of the counties in Missouri have health councils with varying degrees of activity. However, all of these councils are potent vehicles for moulding public opinion on sound health programs and need and deserve the guidance and active participation of the local doctors. Proper information on prepaid hospital and medical care plans may be disseminated on the community level through the medium of the Health Council. It has been brought to the Committee's attention that the cost of membership in Blue Cross and Blue Shield plans, due to increasing utilization, is getting too high for many farmers. Many of the difficulties involved in holding down the utilization of these plans, particularly that of farm members, are fully recognized. Most realize that these plans were started by the medical profession in answer to a need. That need still exists. If we expect our plans to continue to serve this need they must continue to be attractive and within financial reach to most people. All reasonable efforts by physicians to hold down unnecessary utilization of Blue Cross and Blue Shield, by patients, will pay off by holding down the premiums and thereby increasing the potential numerical coverage.

The Committee feels that the four year medical school of the University of Missouri should point its undergraduate training toward that of general practice. In addition a large portion of its efforts in medical postgraduate training should be directed toward general practice. Consideration should be given to the development of a preceptorship program and the idea explored of using selected hospitals outside metropolitan areas of the state in the training program.

It is recognized that additional physicians are still needed in a few locations over the state. During 1953 some forty-two doctors established a private practice in towns of 10,000 or less population in Missouri. The Committee's physician placement bureau, operated from the headquarter's office of the State Association, aided a number of these forty-two doctors in making their location selections. A large volume of correspondence was carried on with physicians, from all parts of the United States, concerning Missouri locations. Various contacts were made during the year with communities requesting help in obtaining additional medical manpower. All members of the State Association received a letter, last fall, from the Executive Secretary containing information on the activities of the placement bureau.

As an experiment this year the chairman of your Committee was privileged to meet with the interns and residents of Kansas City General Hospital on November 11 and to discuss with them the practical, realistic items involved in the general practice of medicine. Following this discussion they were informed as to various medical practice opportunities over the state. It is felt that conferences of this nature with the Committee may well be expanded to include meetings with additional groups of interns and residents. The Committee also developed and sent to each hospital, in the state, training interns, an attractive bulletin board announcement of the placement Bureau's service. Mention was made of Missouri's physician placement activities, along with a few other states, in the editorial comments of the *Journal of the American Medical Association* for December 26, 1953.

The Indigent Hospital and Medical Care Survey for the state of Missouri is now under way with a pilot study being run in Cooper County. This survey is sponsored and financed through the Missouri Health Council of which the State Medical Association is a member. The actual collection of the facts and figures in the survey will be done by the Institute of Research of the University of Missouri of which Dr. C. E. Lively is Director. A technical advisory committee at the University was appointed to work with the Institute of Research. One member of this committee is William Sodeman, M.D., Chairman of the Department of Medicine, in the Medical School. Mr. Mark Hale of the University will serve as director of the actual Medical Indigency Study under the direction of the technical committee. The study committee understands its task to be three-fold; namely, (1) preparation estimate of the total number of medical indigents in rural Missouri; (2) enumeration of the characteristics of medical indigents from the standpoint of age, sex, race, medical diagnosis, treatment and services received, and (3) delineation of patterns of organization for medical care in the various counties. The committee recognizes four sources of data to be used in the study: records of welfare offices, records of hospitals, reports from private medical practitioners and records from public agencies giving medical care to the indigent such as the State Crippled Children's Service and the Vocational Rehabilitation Service. The committee also is operating on the basis of the definition of medical indigency arrived at by the state committee appointed by the Missouri Health Council. This group defined medical indigents as those individuals who received free services from some health or medical care agency or practitioner or had help from a public agency in purchasing such services.

With the limited funds available for the study it is necessary for the study committee to conduct the survey through a sampling technic. In selecting counties to be considered for sampling the following counties were excluded: St. Louis, St. Louis City, Buchanan, Jasper, Clay, Jackson and Greene. The twenty-seven counties selected for the survey are representative rural counties as based upon statistical formula. The doctors in thirteen of these counties will be asked to keep certain records on their indigent patients for a six month period. These thirteen counties are: Harrison, Schuyler, Lewis, Boone, Jefferson, Crawford, Laclede, Polk, Vernon, Cape Girardeau, Butler, Ozark and McDonald. The value of this study to doctors as well as to the entire state is aptly put by Dr. E. C. Bohrer, late President of our Association:

A group takes advantage of the luncheon break.

The House reassembled at the appointed time.

"As I view this study it offers doctors an opportunity to demonstrate the service our profession gives through free care to economically disadvantaged persons in our state. The public hears frequently of people who do not receive care because they can't afford it. They seldom, if ever, hear about those to whom we regularly furnish free care. Thus the results of this survey gives us a chance to show that we have not received due credit for the disproportionate share of the burden we have been carrying. Some of us well remember a few years back when we carried an even greater share. This could happen again. In addition, the results of the survey may lead other groups more clearly to recognize their responsibility in this matter. In rural areas free clinics, as they exist in cities, are not available to medical indigents and the burden therefore falls on private practice primarily.

The Council met several times during the year.

"The objective of the study is to find out how many medical indigents there are in rural Missouri; describe their age, sex, and race; determine what their medical problems are; and see what medical services they now receive and from what sources. You can readily see that if this is to be done at all accurately those of us who are in private practice must be willing to share our knowledge of this problem."

The Committee strongly urges all doctors over the state to give their full support to this study when called upon for help in any way.

A. E. SPELMAN, Chairman,
H. W. CARRINGTON,
W. A. BROYLES,
W. J. SHAW,
JOSEPH C. CREECH,
CHARLES H. LEWELLEN,
C. ALEX MCBURNEY,
A. J. C. MCCALLUM,
JOHN J. KILLION.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The House of Delegates recessed at 12:15 p. m. and reconvened at 2:00 p. m.

The Council receives a special report.

The report of the Council, Victor B. Buhler, M.D., Kansas City, Chairman, follows:

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1. Heller, E. M.: The Treatment of Essential Hypertension. *Canad. Med. Assn. Jour.*, 61:293, Sept., 1949.

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REPORTS OF THE COUNCIL

Meeting of June 27, 28

The Council met at the Sheraton Hotel, St. Louis, on June 27 and 28, with Victor B. Buhler, M.D., Kansas City, Chairman, and W. S. Sewell, M.D., Springfield, Vice Chairman, presiding. Those present were Drs. Buhler, Sewell, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; Raymond O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; J. H. Summers, Lebanon; Frank W. Hall, Cape Girardeau; E. Claude Bohrer, West Plains; E. Royse Bohrer, Jefferson City; Carl F. Vohs, St. Louis; H. E. Petersen, St. Joseph; Paul Baldwin, Kennett; Rolla B. Wray, Nevada; A. S. Bristow, Princeton; Henry Allen, St. Louis; James R. McVay, Kansas City; Messrs. John W. Noble, Kennett; W. H. Bartleson, Kansas City; Lemoine Skinner, James Koenig, Raymond McIntyre and T. R. O'Brien, St. Louis.

Guy N. Magness, M.D., was named President by the Council.

Conference on Patient Care

A request from the Conference for Improvement of Patient Care was presented that the amount furnished by the Association be raised from $100 to $200 annually. On motion of Dr. Sewell, this was approved.

Thank You Notes

Notes were read from Dr. Hyndman thanking the Council for flowers at the time of Mrs. Hyndman's death; also a note from the Physiotherapists thanking the Association for its help in their annual session. An acknowledgement of the receipt of $500 by the Missouri Health Council for the study of indigent care was read.

The newspapers took pictures of officers.

A.M.E.F.

Mr. O'Brien reported twenty-nine checks received and fourteen pledges made from Missouri physicians for A.M.E.F., also $140 received from the Woman's Auxiliary.

Treasurer's Report

The Treasurer presented the financial report for the Association, which on motion was accepted.

Audrain County Hospital Suit

The bill for the legal help in the Audrain County Hospital suit in which the Association was a co-defendant was presented. On motion of Dr. Petersen, it was ordered paid out of current funds.

Community Health League

The history and purposes of the Community Health League and its current financial situation were discussed. On motion of Dr. Francka, it was voted that the Missouri State Medical Association assist the Community Health League financially as necessary until the time of the next meeting of the House of Delegates.

Future Activities

The following special committee to study legislative problems with certain aspects to be handled by the various standing committees involved was suggested, the committee to be empowered to study all aspects of licensure in the healing art field in Missouri: A. E. Spelman, M.D., Smithville, Chairman, Committee on Rural Health; Wilson J. Ferguson, M.D., Sikeston, Chairman, Committee on Medical Education and Hospitals; Sedgwick Mead, M.D., St. Louis, Chairman, Committee on Physical Medicine; W. F. Francka, M.D., Hannibal, Chairman, Committee on Public Policy and Public Relations; Avery P. Rowlette, M.D., Moberly, Chairman, Committee on Medical Economics; E. C. Bohrer, M.D., West Plains; H. E. Petersen, M.D., St. Joseph; E. Royse Bohrer, M.D., Jefferson City; Victor B. Buhler, M.D., Kansas City; Carl F. Vohs, M.D., St. Louis.

On motion of Dr. Hall, the Council voted approval of the committee and its purposes.

Attorney Retained

After discussion, on motion of Dr. Muether, it was voted that the Executive Secretary be empowered to retain an attorney on an annual basis.

Attorney for Committee

On motion of Dr. Muether, it was voted that the Special Committee, just approved, be empowered to secure legal help as is necessary.

Field Secretary's Report

Mr. McIntyre reported on the meeting of the Missouri Health Council on May 4 and said that the study of indigent care in Missouri had begun. He reported on several special society meetings. He also reported several special events, as the "Dr. Hawkins' Day" at Salisbury. He reviewed the recent hyphenations of societies, which have been approved by the Council. Upon request that the Council decide at this time if the Association have an exhibit at the Missouri State Fair, on motion of Dr. Sewell, it was decided to do so. Mr. McIntyre reported that ten physicians had recently located in rural communities in Missouri. A discussion of new county hospitals in the state followed the report.

1954 Annual Session

Mr. O'Brien presented the following suggested outline for the 1954 Annual Session, prompted by the resolution presented in the 1953 session, which was not adopted but which showed dissatisfaction with the business sessions interfering with the scientific sessions:

Sunday—House of Delegates—10:30 a.m.
Reference Committee Meetings—(4:00 p.m.-6:00 p.m. 8:00 p.m.)
Monday—Scientific Sessions—9:00 a.m.-4:00 p.m.
Round Table Luncheon—12:00 noon.
House of Delegates—4:00 p.m.
Reference Committees—8:00 p.m.
Any other Association Committees—6:00 p.m. on.
Tuesday—Scientific Sessions—9:00 a.m.-5:00 p.m.
Round Table Luncheon—12:00 noon.
Banquet—7:30 p.m.
Wednesday—Scientific Sessions—9:00 a.m.-12:00 noon.
Missouri University Alumni—12:00 noon.
House of Delegates—1:30 p.m.
Council Meetings—two weeks prior to Annal Session. Saturday night preceding the opening of Annual Session; and Monday night at same time of Reference Committee meetings.

Next Council Meeting

It was announced that Dr. Summers had made arrangements for the Council to meet at Bennett Springs Park on September 26 and 27.

Doctor Draft Law

A resolution submitted by the Jackson County Medical Society regarding the Doctor Draft Law in the House of Delegates at the last Annual Session was referred to the Council for implementation. The resolution was not suitable in a few respects to some of the delegates and the Council was asked to attempt to work out these differences and to then notify the Congress of the opinion of the Missouri medical profession in this regard. Following approval of the resolution, letters were sent to the Congress together with a copy of the finally approved resolution.

Dr. Allen gave information on the Doctor Draft Law saying that it affected thirty physicians in Missouri. He answered questions of individual Councilors.

Woman's Auxiliary Bulletin

It was suggested that since the Council had agreed to take over the expenses of the publishing of the Woman's Auxiliary Bulletin, that $600 a year be allocated for this purpose. It was felt that no motion was needed on this since there had been previous Council action on the Council taking this responsibility.

Councilor's Letters

The proposal that individual Councilors send letters to each member in his district following Council meetings, which had been proposed at the last Council meeting, was discussed. Mr. Skinner pointed out that it would cost approximately $5,400 to do this and the Executive Secretary's letter which is now being sent, practically all the expense being in the mechanical production. After discussion, this was referred to the Committee on Public Policy and Public Relations, three of which were present, with the request that the Committee report to the Council the following day.

The following report was presented by Dr. Francka, Chairman of the Committee on Public Policy and Public Relations: The Committee recommends:

1. The letter of the Executive Secretary shall be continued but should be expanded to include more information on work of office personnel, especially the Field Secretary.

2. After each Council meeting a letter will be sent to each Councilor for correction or approval, after which letters will be prepared and sent to the Councilor for signature and mailing to the secretaries and presidents of each county society in his district with the request that it be read and discussed at the next society meeting.

3. A release will be prepared on Council meeting transactions suitable for publication and submitted to the editor of each medical society bulletin in the state.

Legislation

Mr. O'Brien reported on the Missouri General Assembly, presenting a listing of bills, which appeared in the July issue of MISSOURI MEDICINE, and giving the story behind some of the bills. He stated that special thanks were due to several individuals for assistance in the session. He urged that the Councilors and the physicians in their Districts become acquainted with their legislators before the next General Assembly in 1955.

A.M.A. Session

Mr. O'Brien told the Council that Dr. Robert E. Schlueter, delegate to the American Medical Association, was unable to be present because of the serious illness of his wife. Drs. McVay, Baldwin, Wray, Bristow and Bohrer reported on the session and copies of the majority and minority report of the A.M.A. Committee for the Study of Relations Between Osteopathy and Medicine (which have been published in the J.A.M.A., June 20, 1953) were before the Council and were discussed. On motion of Dr. Muether, the A.M.A. report was ordered given to the newly appointed special committee of the Council for further study as to any action Missouri should take.

Illness of M. Pinson Neal, M.D.

The illness of Dr. M. Pinson Neal, Columbia, was reported and the secretary was asked to write a letter to Dr. Neal, wishing him speedy recovery.

Resolutions on Interns

It was reported that the two resolutions passed by the MSMA House of Delegates on intern matching plans were submitted to the A.M.A. House of Delegates, neither of which was adopted but that a substitute resolution was adopted which abolishes the rule whereby approval may be withdrawn from an internship program which for two consecutive years fails to obtain at least two-thirds of its slated complement of interns. The resolution also calls for further study of the essentials by a committee appointed by the Speaker of the House, at least half of whom are doctors in private practice not connected with medical schools or affiliated hospitals.

Woman's Auxiliary

Mrs. Helen McBurney, Slater, President of the Woman's Auxiliary spoke briefly, thanking the Council for its support and asking that they continue it and expressing the hope that at some future time the Auxiliary might have a headquarters location.

MEETING OF SEPTEMBER 26, 27

The Council met at Bennett Springs State Park on Sept. 26, 27, 1953, with Victor B. Buhler, M.D., Kansas City, Chairman, presiding. Those present were Drs. Buhler, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Staufacher, Sedalia; W. S. Sewell, Springfield; J. H. Summers, Lebanon; E. Claude Bohrer, West Plains; H. E. Petersen, St. Joseph; Carl F. Vohs, St. Louis; E. Royse Bohrer, Jefferson City; V. T. Williams, Kansas City; R. B. Wray, Nevada; Henry Allen, St. Louis; J. W. Thompson, St. Louis; A. S. Bristow, Princeton; J. R. Amos, Jefferson City; Mr. John Noble, Kennett; Messrs. John Buckner, Springfield; Lemoine Skinner, St. Louis; Raymond McIntyre, St. Louis; T. R. O'Brien, St. Louis.

Boy Scout Drive

Mr. O'Brien presented correspondence concerning a statewide Boy Scout Movement and a Statewide Campaign beginning October 20 and asking support. On motion of Dr. Petersen, the Council voted to approve the drive and instructed that a letter be sent to county society secretaries to this effect.

Annual Session Program

Mr. O'Brien announced that the Program Committee for the 1954 Annual Session was progressing with its work but that it was not far enough advanced for a report at this meeting of the Council.

Treasurer's Report

Dr. Vohs presented the financial statement and Treasurer's report, which was accepted.

Missouri Medicine

Dr. Williams presented copies of the October issue of Missouri Medicine which members had not received as yet and copies of other state journals for comparison. After discussion, on motion of Dr. Royce Bohrer, the Council approved the continuance of Dr. Williams as Editor and Dr. Muether to have charge of scientific material. On motion of Dr. Petersen, the Council voted that special issues of the journal, on state geographical basis, be promoted.

Doctor Draft Act

Dr. Allen stated that at the present time the Doctor Draft Act was probably a "dead issue" but that in about a year it will become active—that no one can foretell the exact future, a lot depending on the attitude of the government toward active or passive defense against atomic warfare. He said that 5,000 doctors will be needed between July 1954 and 1955 on the present basis. He said the attempt now is to lower the percentage of doctors to 3 per 1,000 men in the Armed Services.

Field Secretary Report

Mr. McIntyre gave a report on recent meetings and gave a schedule of meetings that would be held in the near future, county society meetings and combined meetings with the Academy of General Practice. He reported a meeting of the Committee on Rural Health on August 9, a talk before a group of Farm Bureau women at Camp Kaiser on August 12 and on the exhibit of the Association at the State Fair in Sedalia which began on August 21. On hospitals in the state, he reported that Bethany has formed a nonprofit hospital association and was proceeding on that plan rather than a county tax supported hospital; that Cameron is attempting to increase the size of its hospital; that Jefferson County is studying the need for a hospital; that Chillicothe is increasing the size of its hospital; that Clay County is attempting to have a new hospital other than a county hospital. He reported that up to the present time 40 physicians have located in towns of less than 15,000 population. The report was followed by discussion, including some problems of hyphenations which have been considered.

Legislation

Mr. O'Brien reported that S. B. 375, providing that all medical expense be exempt from state income tax and which passed, was vetoed by the Governor because of technicalities in the bill. Attention was called to a letter from the A.M.A. on the Bricker amendment which would limit the executive power in the making of treaties and pointing out that this could supercede the Congress and Constitution and was of interest to physicians because such could happen in regard to socialized medicine. Mr. O'Brien discussed the Jenkins-Keough bill, which deals with the exemption from federal income tax of payments for annuities and such investments of self-employed persons.

Veterans Administration

Mr. O'Brien reported on a meeting which he attended in Chicago on September 1 dealing with the action of the A.M.A. House of Delegates, June, 1953 on nonservice connected disabilities of veterans. He read the following:

"Your Committee (Reference Committee of House of A.M.A.) recommends with respect to the provision of medical care and hospitalization benefits for veterans in Veterans Administration and other federal hospitals that new legislation be enacted limiting such care to the following two categories:

"(a) Veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated, and

"(b) Within the limits of existing facilities to veterans with wartime service suffering from tuberculosis or psychiatric or neurological disorders of nonservice connected origin, who are unable to defray the expenses of necessary hospitalization.

"Your Committee recommends that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with nonservice connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs.

"The Reference Committee report adopted by the House expressed complete accord with the present program of hospital and medical care for veterans with service connected disabilities, and also included this statement:

"It is the belief of your committee that the medical profession must concern itself, not with the numbers of 'chiselers' in Veterans Administration hospitals nor with the efficacy of the Veterans Administration in the administration of enabling legislation, but rather with the broad question of whether such legislation is sound, whether the federal government should continue to engage in a gigantic medical care program in competition with private medical institutions and whether the ever increasing cost of such a program is a proper burden to impose on the taxpayers of the country. A consideration of this problem must of course be predicated upon a concern for the health of the entire population and not just a particular segment."

He pointed out that there are now 20 million veterans and this is increasing at about 1 million per year and on this basis, in fifteen years there will be 35 million veterans, which represents more than a half of the employed persons in this country. He presented an action that was passed by the American Legion Convention recently in St. Louis, as follows:

"Whereas, The hierarchy of certain uninformed and ill advised medical organizations of the United States recently offered testimony before the Subcommittee on Hospitals of the Committee on Veterans Affairs of the House of Representative, 83rd Congress, 1st Session as follows: 'We do not feel that a Veteran, per se, who has suffered no disability by reason of his service in the Armed Forces, who has come out well and whole, has any more demand on the Federal Government than any other citizen. He has discharged the normal obligation of a man to bear arms in the defense of his Country. He should do that as a part of his citizenship, and by virtue of it, unless his service has resulted in some disability, we do not feel that he has any call on the Federal Government. We think that if he is indigent, he is a community responsibility.' And

"Whereas, The same medical organizations have gone on record at their recent National Conventions that it is their belief that these organizations must concern themselves not with the efficacy of the Veterans Administration in the Administration of enabling

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Arthralgia, however, is just one of a vast number of distressing but ill-defined symptoms that may be precipitated by the loss of estrogen as a "metabolic regulator." Other good examples are insomnia, headache, easy fatigability, and tachypnea.

Because these symptoms sometimes occur years before or even long after cessation of menstruation, they are not always readily associated with estrogen deficiency, and the tendency may be to treat them with medications other than estrogen. Obviously, sedatives and other palliatives cannot be expected to produce a satisfactory response if an estrogen deficiency exists. Only estrogen replacement therapy will correct the basic cause of the disorder.

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1. Greenblatt, R. B., and Kupperman, H. S.: M. Clin. North America *30*:576 (May) 1946. 2. McGavack, T. H., in Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 225.

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legislation but rather with the broad question of whether such legislation is sound. Now, therefore be it

"*Resolved,* By the American Legion in National Convention assembled in St. Louis, Missouri, this 2nd day of September, 1953, that we hereby reiterate our position of many years that the man or woman who was called into the Armed Forces of this country by our Government, told where and when to go, what to wear and how, what to eat, when to go to bed and when to arise, what shots to take and who for risking his or her life, has been placed in a very special class by that Government, and

"*Be it further resolved,* That we know that historically, the citizens of the United States, through our Congress have always considered all veterans a special class of citizens and have always shown the respect and affection for these veterans by certain benefits and just compensations, and

"*Be it further resolved,* That we reiterate and again support and endorse the basic principle of our Country that veterans who have fought for and defended all of our citizens are indeed a distinct class and the direct and specific responsibility of our Federal Government when in need, or are sick, broke and have no place to go."

On motion of Dr. Dowell, the Chairman of the Council was empowered to appoint a committee to study veteran's care.

AMEF

Mr. O'Brien presented a request from the A.M.A. that the Illinois plan of assessing each member $20.00 for the American Medical Education Foundation be studied by other state associations. After discussion, the Council voted, on motion of Dr. Muether, to go on record as opposed to the Illinois plan and that MSMA continue to urge members to voluntarily contribute to the AMEF.

A.M.A. Membership

A request of the A.M.A. that a resolution introduced by the Minnesota Association be studied by other associations was presented. It dealt with compulsory membership in the A.M.A. and the method of collecting back dues. On motion of Dr. Washburn, this matter was tabled.

Report by Dr. Amos

Dr. Amos expressed his appreciation for the cooperation of physicians in regard to gamma globulin. He also explained that because of a cut in federal funds, that laboratory facilities at the State Board of Health had necessarily been curtailed.

Presentation to Dr. Thompson

Dr. Buhler presented a bound volume of The Journal of the Missouri State Medical Association and Missouri Medicine including the issue which gave the proceedings at which Dr. Thompson presided, to Dr. Thompson. At Dr. Thompson's request, all those present autographed the volume.

H. B. 82

Mr. O'Brien asked the opinion of the Council as to Blue Cross, Blue Shield and the Association going under the permissive legislation for nonprofit organizations to organize under certain conditions including a periodical report to the Secretary of State. On motion of Dr. Dowell, the Council voted to defer this until the next Council meeting to allow time for study.

Budget Committee

Dr. Buhler appointed the following Budget Committee: Drs. Vohs, Francka, Petersen, E. C. Bohrer and Buhler. On motion of Mr. Muether, this was approved.

Committee on Laboratory Medicine

Dr. Buhler announced the appointment by the President of the following members of the Committee on Laboratory Medicine: Omer Hagebusch, St. Louis, Chairman (2 years); Richard Riddell, St. Joseph (3 years); Henry C. Allen, St. Louis (3 years); Jack H. Hill, Kansas City (2 years); John A. Saxton, Jr., St. Louis (1 year).

MEETING OF DECEMBER 5, 6

The Council met at the Sheraton Hotel, St. Louis, on December 5, 6, 1953, with Victor B. Buhler, M.D., Kansas City, Chairman, presiding. Present were Drs. Buhler; W. F. Francka, Hannibal; Raymond O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; W. S. Sewell, Springfield; J. H. Summers, Lebanon; Frank W. Hall, Cape Girardeau; H. E. Petersen, St. Joseph; E. Royse Bohrer, Jefferson City; Carl F. Vohs, St. Louis; R. E. Schlueter, St. Louis; Henry Allen, St. Louis; James R. Amos, Jefferson City; Victor E. Scherman, St. Louis; A. E. Spelman, Smithville; Thomas Thale, St. Louis; Daniel B. Landau, Hannibal; Paul O. Hagemann, St. Louis; Guy Magness, University City; Messrs. J. W. Foristel, Washington, D. C.; John W. Noble, Kennett; Lemoine Skinner, James Koenig, Raymond McIntyre and T. R. O'Brien, St. Louis.

Veterans Medical Care

Mr. O'Brien announced the appointment by the President of a Committee on Veterans' Medical Care, consisting of W. J. Shaw, M.D., Fayette, Chairman; Ralph Perry, M.D., Kansas City; A. R. Dalton, M.D., and Leo J. Hartnett, M.D., St. Louis, with an additional member to be named from outstate.

Recent Publications

Attention was called to the recent Mirror of Public Opinion in the *Post-Dispatch* using a talk by Dr. Bohrer on rural medical practice; also to the article in the October 30 issue of *Collier's,* "Some Doctors Should Be in Jail," and correspondence between Mr. O'Brien and the editor of *Collier's* was read.

Conference of Presidents

On motion, the usual dues of $75.00 to the Conference of Presidents was voted.

Better Business Bureau

On motion, the usual dues of $100.00 to the Better Business Bureau was voted.

Report of Field Secretary

Mr. McIntyre reported the following meetings and attendance in the last two months: Oct. 5, Nodaway-Atchison-Gentry-Worth Counties; Oct. 6, six counties at Kennett, with 20 in attendance; Oct. 8, Grand River with 21; Oct. 8, Cape Girardeau with 22; Oct. 20, Marion-Ralls-Shelby; Oct. 22, Rolla, with 23; Oct. 28-29, Missouri Academy of General Practice at Jefferson City with 135; Nov. 4, Poplar Bluff with 33; Nov. 5, Clay County Conference with 72; Nov. 12, Harrisonville with 29; Nov. 12, Tenth Councilor District at Cape Girardeau with 39; Nov. 18, Johnson, Henry, Pettis and Saline at Sedalia with 35; Nov. 19, University of Missouri Medical School and Missouri Academy of General Practice at Columbia with 50; Nov. 19, St. Charles-Lincoln with 17; Nov. 19, Mineral Area at Farmington with 18; Nov. 19, Rolla with 20; Nov. 24, Marion-Ralls-Shelby at Hannibal with 31; Nov. 27, Jefferson County at Herculaneum with 10. He pointed out that at most of these meetings there were two scientific speakers and that many were in cooperation with the Missouri Academy of General Practice and that credit was given for attendance.

Mr. McIntyre told of other meetings as follow: School Health Conference in Highland Park, Sept. 26-27; Missouri Health Council in Jefferson City on October 12; Missouri Hospital Association in St. Louis on Nov. 19-20. He called attention to the mass immunization of gamma globulin of 5,000 persons in Moberly on Sept. 17, 18 and 19. In discussion, it was brought out that the Council would be interested in helping Clay County celebrate its 100th anniversary in 1954. Placement of physicians and hospitals were discussed and it was announced that the A.M.A. is to make a check on occupancy of the Hill-Burton Hospitals.

Dr. Amos

Dr. Amos pointed out that percentage of occupancy varied with the size of the hospital and that the demand for beds for chronic diseases is a problem at present. He brought out that the recent hospital licensing law had created some problems and that he was going to ask various organizations to furnish personnel to meet and advise with him and asked that a committee from the Association be named for this purpose. He called attention to a Medical Civil Defense meeting to be held in Jefferson City on Dec. 9. Dr. Amos said that the question still remains of the State Cancer Commission being an advisory body or with power to conduct the Cancer Hospital. He spoke of the relation of the hospital to the University of Missouri Medical School. He announced that a trial run of the use of polio vaccine will be carried out between February and June 1 and asked the cooperation of the Council. In certain counties, children in the second grades will be vaccinated, those in the first and third grades to serve as controls.

On motion of Dr. Summers, it was voted to request the President to appoint a committee to advise with Dr. Amos. On motion of Dr. Bohrer, the Council voted to cooperate in the trial of the new polio vaccine.

A.M.A. Washington Report

Mr. J. W. Foristel, legal consultant in the A.M.A. Washington office, explained that the Washington office has for its main purpose keeping physicians informed. He pointed out that no compulsory health bill had been introduced since 1949 but that in the two year period 1951 and 1952, there were 250 bills introduced in Congress which influenced the practice of medicine, and that in 1953 there were 274 bills, many in the field of social security but still influencing medicine. He pointed out that when any beneficiary cannot be given more in dollars, they may then receive service and that the first service is often health care. He said that it was felt that President Eisenhower wished all persons covered by social security. He said that each additional health service given brought more physicians under the federal payroll. He discussed the situation on service and nonservice connected disability care of veterans and gave the figure of 35,000 service connected disabilities as against 65,000 nonservice cared for per day in veterans' hospitals, and that the average stay for a veteran in a veterans' hospital was 30.4 days as against 7.1 in a private hospital. He said that other important things before Congress are the Bricker resolution concerning treaties and the Jenkins-Keough bills on pension plans.

Mr. Foristel then reviewed the Special Report No. 11 on "Medical and Health Budgets of Federal Agencies" which was issued by the Washington Office on October 21, giving more detail than was in the report. Copies of the report were given to the Council.

Dr. Bohrer Greetings

It was moved and voted that a telegram be sent Dr. E. C. Bohrer, President, who was absent from the meeting because of illness.

H. B. 82

On motion of Dr. Muether, it was voted that the Council disapprove of M.S.M.A. going under the new legislation on nonprofit organizations, H.B. 82.

Budget

The following budget was presented by Dr. Vohs, Chairman of the Budget Committee, and on his motion, seconded by Dr. Sewell, was adopted.

Budget for 1954

Salaries	$ 38,750.00
Journal Expense	27,000.00
Postage, printing and stationery	4,500.00
Travel—Executive Secretary	1,300.00
Travel—Field Secretary	2,800.00
Telephone and telegraph	1,600.00
Office rent and light	3,000.00
Meetings and committee expense	17,700.00
Defense	500.00
Scientific and Postgraduate Work	1,000.00
Woman's Auxiliary	1,000.00
Public Relations	7,000.00
Insurance Annuity	2,780.00
Miscellaneous General expense	3,000.00
Furniture and Fixtures	1,000.00
Social Security Tax	640.00
Legal Expense	1,200.00
Total	$114,770.00

Advisory Committee to Selective Service

Dr. Allen said there was a need for approximately 5,500 physicians annually which by enlistments will be cut to 5,000. He said that a directive to all hospitals was that men should be allowed one year of internship only. He said that the National Advisory Committee does not want the draft act to continue after July 1, 1955. He said that he would contact Councilors in the spring concerning available men in their districts.

Blue Cross and Blue Shield

Dr. Vohs reviewed Blue Cross and Blue Shield at the present time, presenting some of the problems, particularly the recent handling of the packing industry group and the methods being used to solve them. He said that there will be a meeting of Blue Shield plans in Chicago in January which may furnish more information.

Resolutions From Greene County

Two resolutions from the Greene County Medical Society were read, one resolving that Blue Shield should handle ancillary services, the other that Blue Cross should not handle these services. On motion the resolutions were accepted and instruction was given to refer them as directed in the resolutions.

Improvement of Patient Care

Dr. Stauffacher reported for the standing Committee on Hospitals and Professional Relations, regarding the Missouri Conference for the Improvement of Patient Care, stating that nurses were desiring a clearer definition of their duties but asking no definite action of the Council at present. On motion of Dr. Francka, the report was accepted and the committee instructed to work out the specific questions of the Conference and report further.

County Hospital Staffs

The means of handling staffs in various county hospitals in the state was discussed briefly. However, two specific hospitals that had asked advice were discussed fully and it was pointed out that the House of

Delegates had stated clearly that the Association would take part only in an advisory capacity.

Committee on Rural Medical Service

Dr. Spelman reported for the standing Committee on Rural Health pointing out the need of physician leadership in community health projects, the advisability of the hyphenation of small county medical societies, the need for health councils with physician participation, contact with the University of Missouri Medical School urging the training of doctors for rural areas, the importance of lectures to interns and the placement service for physicians. He reviewed the survey of indigent medical care to be made in twenty-seven counties of the state by Dr. Liveley of the University of Missouri under the sponsorship of the Missouri Health Council, and urged the cooperation of the Councilors in obtaining cooperation from physicians in these counties. On motion of Dr. Muether, the report was accepted and Councilors urged to cooperate in the survey.

Annual Session

Dr. Hagemann gave information on the scientific program for the annual session, saying that there will be eleven out of state guest speakers, that sectional meetings will be held as well as round table sessions. He said that on Tuesday afternoon of the meeting, wet clinics will be presented in hospitals in the city.

Committee on Mental Health

Dr. Thale submitted the report of the Committee on Mental Health as follows:

"The Committee on Mental Health of the Missouri State Medical Association has considered the legal procedures involving H.B. No. 355, pending before the Missouri Supreme Court. The Committee is of the opinion that the legality of the act, in whole or in part, is outside the province of the Committee, however, mental health and the well being of citizens of our State afflicted with this malady definitely are of concern to the Committee and to the Association; therefore, the Committee recommends that a panel of members of the Committee or of other members of the Association be provided to serve in the capacity of 'Amicus Curiae' relative to the pending Supreme Court proceedings involving H.B. No. 355; and that the members selected will provide any technical or scientific information to the Court regarding mental health in Missouri which may be desired; and that the members selected will provide such information without expense to the Court, or to any of the principals involved, or to the Association itself.

"The State Senate appointed a Committee to study the needs of the State Mental Hospitals composed of the following: Senators Spradling, Cape Girardeau; Noble, Kennett; Crain, St. Louis County; Linneman, St. Charles.

"The Committee will meet in St. Louis, December 10, 11 and 12. It was agreed that a letter should be written to the Senate Committee offering the services of the Committee on Mental Health of the Missouri State Medical Association to assist the Senate Committee in its effort to improve the care and treatment of mentally sick persons in Missouri.

"Dr. Henry Guhleman, Director of the Bureau of Mental Health of the State Division of Health, told the Committee of some of the problems of the Division of Health and explained how Federal Funds had been allocated to assist in the development of Child Guidance Clinics.

"It was agreed that a letter be written to Dr. James R. Amos, Director of Health, State of Missouri, offering the services of the Committee in an advisory capacity to the Bureau of Mental Health."

On proper motion, the report was accepted with commendation.

Committee on Infant Care

Dr. Landau reported on the work of the Committee on Infant Care, including the attendance at the fourth National Conference of School Health, and made the following recommendations:

1. That school health become an active continuous consideration of the Missouri State Medical Association.
2. That the province of considering school health problems be designated to a suitable Association committee.
3. That such Committee be either the Infant Care Committee or a new standing committee be created for the charge.
   a. If the Infant Care Committee is charged with this added function it is suggested that it be expanded, to possibly ten members.
   b. Your present Infant Care Committee favors an expansion with the added responsibilities over the formation of a new School Health Committee.
4. That the State Medical Association take the lead in the near future in seeking a top level meeting with the Missouri Division of Health, the State Department of Education and the Missouri State Dental Association to discuss over-all school health problems and to suggest areas and means of cooperative action.

On motion of Dr. Petersen, the report was accepted with instructions that these recommendations be referred to the Committee on Constitution and By-Laws for presentation to the House of Delegates.

Committee on Public Policy and Public Relations

Dr. Francka called attention to the composition of the Committee on Public Policy and Public Relations and suggested that the committee might be larger, including one member from each Councilor District, this person not to be the Councilor, and that the duties of the committee be increased and not refer so strictly to public relations. Following discussion, on motion of Dr. Muether, it was voted to refer this to the Committee on Constitution and By-Laws for their consideration and possible presentation to the House of Delegates.

MEETING OF FEBRUARY 6, 7

The Council met at the Sheraton Hotel, St. Louis, on February 6, 7, 1954, with Victor B. Buhler, M.D., Kansas City, Chairman, presiding. Present were Drs. Buhler; Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; W. S. Sewell, Springfield; J. H. Summers, Lebanon; Frank W. Hall, Cape Girardeau; Carl F. Vohs, St. Louis; E. Royse Bohrer, Jefferson City; H. E. Petersen, St. Joseph; Victor E. Scherman, Joseph C. Peden, St. Louis; Henry Allen, St. Louis; James R. Amos, Jefferson City; Messrs. Lemoine Skinner and James Koenig, St. Louis; John Buckner and D. E. Caywood, Springfield; John W. Noble, Kennett; Raymond McIntyre and T. R. O'Brien, St. Louis.

Jenkins-Keough Bill

Letters in answers to communication sent Congressmen by Councilors were read. Also correspondence on the Bricker Amendment was read and discussed.

Traffic Accidents

A letter from the Colorado Association relative to a study being made toward urging manufacturers to use safety measure, as padding, was presented, and referred to the Committee on Fractures.

Nurses Conference

Announcement of a conference on nursing on February 19 was presented and was referred to the Committee on Patient Care.

Little Hoover Commission

An invitation from the state organization for study of state government affairs, or Little Hoover Commission, to the Association to present any suggestions was read and it was voted on motion of Dr. Francka, that this was an opportunity for the Committee on Mental Health to propose that the head of the Mental Health Division be a psychiatrist, or that an advisory committee composed of psychiatrists be set up.

A.M.A. Correspondence

A letter from the A.M.A. on government reorganization, dealing with the Manion committee and states rights was discussed and on motion of Dr. Vohs, this was referred to the Committee on Medical Economics.

Treasurer's Report

Dr. Vohs presented the financial statement of the Association, which on motion was accepted.

Field Secretary's Report

Mr. McIntyre reported on meetings held since the last Council meeting. He called special attention to a meeting of the Ozarks County Medical Society at which the program was presented jointly by several organizations, working toward the elimination of too many meetings. He said that from all indications, the meeting was quite successful. He said a similar program would be presented at Cape Girardeau on February 25. He also called attention to a meeting of the Cooper County Medical Society at which the survey for indigent care was fully discussed and physicians were interested in giving full cooperation. He reported that Buchanan County Medical Society will celebrate its fiftieth anniversary this year and the Clay County its hundredth. He announced a meeting of the Missouri Health Council in Jefferson City, Governor Hotel, at 10:00 a.m. on April 30. The subject will be "Health Protection for Rural Missourians," speakers to be drawn from commercial and voluntary prepayment plans. On motion, the report was adopted.

Special Committee on Legislative Matters

Dr. Francka presented the report of the Special Committee on Legislative matters, which, on motion of Dr. Muether, seconded by Dr. Washburn, was accepted for referral to the House of Delegates.

Presidency

Ballots were cast on the Vice President to succeed to the Presidency to fill the unexpired term of Dr. E. Claude Bohrer and, on motion, Guy Magness, M.D., was elected unanimously.

Blue Shield-Blue Cross

Ancillary service payments were discussed and the actions of the House of Delegates of the A.M.A. were reviewed. Following discussion, on motion of Dr. Vohs, it was voted that all ancillary services be paid by Blue Shield to the physicians rendering their own bills and if the bill appears on the hospital bill, an assignment be obtained from the physicians involved so that the hospital may be paid. There was one dissenting vote.

Dr. Amos

Dr. Amos reported progress on the polio vaccine work but said that definite plans had not been set; that probably ultimately it would be handled as whooping cough vaccination. He said that the Division would ask for appropriations to carry out the enactment of the hospital licensing law. He called attention to the amendment to the Hill-Burton law to include rehabilitation, convalescent home, diagnostic clinics and such which is before Congress at the present time.

A.M.A.

Dr. Peden gave a summary of the actions of the House of Delegates at the Interim Session of the A.M.A. enumerating the opposition of the House to the inclusion of physicians under social security, the statement of policy re: medical services under Blue Shield, advocacy of dropping of the Doctor Draft Law, acceleration of voluntary health plans, need of work on insurance for the aged and chronically ill, objection to the joint accreditation board giving hospitals no recourse, the continuation of the A.M.E.F. On motion the report was accepted.

A.M.A. Legislative Committee

Mr. McIntyre reported on the Regional Conference of the American Medical Association Legislative Committee in Atlanta, Ga., on January 31. He said the committee wished to work out a method on alerting key personnel, not only in each state but in each district. He pointed out that the A.M.A. Washington office is primarily informative in functions and the Legislative Committee is for purpose of recommendations. The various legislation discussed was (1) federal subsidation of private health insurance, including reinsurance idea on which A.M.A. has not taken a definite stand; (2) social security coverage for physicians, which A.M.A. opposes; (3) coverage for permanent and total disability, which A.M.A. opposes; (4) waiver of premium payment under Title II of the Social Security Act during period of permanent and total disability; (5) tax deferment on retirement annuity premiums, which is in an omnibus bill to be acted on soon; (6) medical care of dependents of service personnel, which the A.M.A. assumes the Hoover Commission will study; (7) the Bricker Amendment; (8) government aid to medical education; (9) universal military training; (10) deductions for medical care on income tax; (11) medical benefits for veterans with nonservice connected disability; (12) "free" hospital benefits for social security beneficiaries.

Dr. Allen

Dr. Allen spoke briefly on the National Advisory Committee saying that the next draft call will probably be in October and that difficulty would be in holding residents to finish their medical education.

Civil Defense

A Civil Defense meeting to be held in Kansas City, Muehlebach Hotel, February 14, was announced, together with a letter from Dr. Hungate, reviewing the work of the medical committee in the Civil Defense work.

Medical Examiner Law

A letter from the Missouri Bar Association regarding the appointment of a medico legal committee to cooperate with the state bar association was read. After discussion it was felt that this should be in the province of the Public Relations committee and that that committee would probably be enlarged by the House of Delegates to include representation throughout the state. On motion of Dr. Muether, it was voted to table this until after a new Committee on Public Relations, probably larger than the present, had been appointed.

Dr. Magness Welcomed

At the Sunday session, Dr. Buhler welcomed Dr. Guy Magness, University City, who will fill out the term of the Presidency.

Annual Session

Mr. Koenig reviewed the publicity on the Annual Session, giving dates and information on the types of releases to go out, first to acquaint the membership on the session and, secondly, to newspapers.

A.M.E.F.

Dr. James Murphy reported for the American Medical Education Foundation, saying that medical schools were constantly having more difficulty with finances. He gave figures on various years: in 1951, 1,800 physicians contributed $745,000; in 1952, 7,259 contributed $900,000; in 1953, 18,176 contributed $1,089,000. In Missouri, in 1952, 21 physicians contributed $1,260 and in 1953, 127 contributed over $4,000. It was pointed out that in Illinois an assessment was placed and in New York a voluntary assessment was placed and in both states there were large contributions. It was pointed out that contributions directly to schools were not included in these figures. Ways and means of increasing contributions in Missouri were discussed. On motion of Dr. Muether, it was voted that each Councilor be asked to appoint a committee to assist in the effort to increase the contributions to the A.M.E.F., at the same time proceed with letters from the state office.

National Guard

Dr. Stauffacher, reporting for Dr. Siegel of Sedalia, said that in some parts of the state, the Missouri National Guard was having difficulty in obtaining examinations and immunizations for members and asked the cooperation of the medical profession.

Venereal Disease Reporting

Dr. E. M. Cannon presented the report of the Committee on Control of Venereal Disease, in which the Committee asked that private laboratories be requested to report on positive venereal disease findings in order that a better picture of the occurrence could be obtained, it being felt that the clinician did not report all cases. After discussion, on motion of Dr. Muether, the report was accepted and referred to the Committee on Laboratory Medicine.

Dr. Bohrer

Preceding adjournment a moment of silence in memory of Dr. E. Claude Bohrer was observed.

Victor B. Buhler, Chairman.

Supplemental Council Report

Dr. Buhler: Mr. Speaker, Members of the House of Delegates, the Council desires to call the attention of the House to several matters of special importance, most of which are included in the reports of the Council beginning on page 32 of "Reports of Officers and Committees." However, some merit emphasis at this time.

Changes in Time of Meetings

A resolution was introduced at the 1953 Annual Session calling for separate meetings, at different times of the year, of the House of Delegates and the Scientific Session in order that there would be no conflict between scientific meetings, House of Delegate meetings or reference committee meetings. The resolution was not adopted; however, the desire was expressed that study be given to the possible elimination of conflicts between these various meetings.

The Council carefully studied the times of the meetings usually held at the Annual Session and unanimously approved the "Schedule of Meetings" as shown on page 35 of the "Reports of Officers and Committees."

Hyphenations

The following county medical societies were hyphenated since the last session of the House: Butler, Ripley, Wayne, now known as Butler-Ripley-Wayne County Medical Society; Bates, Cass, Cedar, St. Clair and Vernon, now known as West Central Missouri Medical Society; Newton County Society has hyphenated and will become part of the Ozarks Medical Society.

Councilors' Reports

The Councilors, with the assistance of the staff, have prepared reports on Council meetings which have been sent to the presidents and secretaries of county medical societies in the respective districts, with the suggestion that these reports be brought to the attention of members at county society meetings. These reports have outlined the actions of the Council during the last year. Since the preparation and mailing of these reports have involved some expense as well as additional work for the staff, we should like to know whether or not you wish them continued.

Committees

The standing and special committees of the Association have again done an excellent job. You will find that 17 of them have reports included in "Reports of Officers and Committees." In addition, you have heard the reports of other Committes read this morning. All of this speaks well for the desire of the medical profession to improve health care in Missouri.

Doctors' Draft Law

A resolution was introduced at the 1953 Annual Session regarding public law 779, known as the doctor's draft act. This resolution was approved in principle by the House of Delegates, however, at the time of adjournment of the House there was some disagreement as to the wording of the resolution. Because of the lack of time, the resolution was referred by the House to the Council for appropriate action after conference with the several sponsors of the resolution.

The Council instructed the staff to get in touch with the several sponsors in order to properly word the resolution. This was done and the resolution with a covering letter was sent to each of the United States Senators and Congressional representatives from Missouri, as called for in the resolution.

Shortly after that time, the Doctors' Draft Act was passed by the Congress and the bill as finally drafted has met with the general approval of the medical profession.

Resolutions on Internships

Two resolutions were introduced at the 1953 session dealing with hospital internships. The resolutions were approved by the House, instructing our delegates to the A.M.A. to introduce them at the 1953 session of the A.M.A.

One of the resolutions, offered by the Council, recommending that the "matching plan for internships" be abolished, was introduced by the A.M.A. Delegate Paul Baldwin. This resolution did not receive the favorable recommendation of the Reference Committee and was not adopted by the A.M.A. House of Delegates.

The other resolution, offered by Delegate O. P. Hampton, for a more equitable distribution of interns, was introduced by A.M.A. Delegate Paul Baldwin. The Reference Committee on Medical Education and Hospitals of the A.M.A. considered it, along with four other similar resolutions.

The Reference Committee recommended the adoption of a substitute to the various resolutions, which was adopted by the House, reading as follows:

Whereas, From the hearings before your reference committee at this time it was concluded that the action taken by the House of Delegates at the session in Denver in 1952 was done without opportunity for thorough study and deliberation by the members of the House of Delegates; and

Whereas, There appears to be considerable dissatisfaction with the present Essentials of an Approved Internship as testified to by the number of members who appeared before the committee; and

Whereas, The postponement of enforcement and effectiveness of the Essentials for three or four years would serve no practical purpose; therefore be it

Resolved, That the House of Delegates abolish the rule whereby approval may be withdrawn from an internship program which for two consecutive years fails to obtain at least two-thirds of its slated complement of interns; and be it further

Resolved, That further study be continued by a committee appointed by the Speaker of the House of Delegates, at least half of whom are doctors in private practice not connected with medical schools or affiliated hospitals.

Report of Special Committee on Veterans Medical Care

The Council, at its meeting on September 27, 1953, appointed a Special Committee on Veterans Care to study resolutions adopted by the A.M.A. on that subject and to make recommendations to the Council for possible transmittal to the House of Delegates of the Missouri State Medical Association. The members of the Committee are: Drs. William J. Shaw, Fayette, chairman; Ralph Perry, Kansas City; Leo J. Hartnett, St. Louis; and Arthur R. Dalton, St. Louis.

The Committee has studied the resolution adopted by the A.M.A. House of Delegates, June, 1953. Members of the Committee have attended regional meetings of the A.M.A. Committee on Federal Medical Services of the Committee on Medical Service, at which the problem was presented in full detail. All members of the Committee have studied the information kit on VA Medical Care supplied by the A.M.A.

Articles appearing in the J.A.M.A., January 16, 1954, pages 264-265, entitled "A.M.A. Policy on Veterans Medical Care" and J.A.M.A., February 27, 1954, pages 755-764 inclusive, entitled "The Medical and Hospital Program of the Veterans Administration," were read by the Committee and it is recommended that every member of the Association read these informative articles. The Committee wishes to call to the attention of the members the excellent article appearing in *Readers Digest,* March, 1954, page 47, entitled, "The VA Route to Socialized Medicine."

With this background, the Committee recommends that, (1) a special or standing committee of the Association be authorized to study and make recommendations on the ramifications of the problem of supplying medical services for veterans; and that (2) information be supplied by the Committee to all county medical societies so that all members may become aware of the problem; and that (3) informative articles be included in MISSOURI MEDICINE, and it is further recommended that the following resolution be submitted for consideration of the House of Delegates.

Resolution re: Veterans Care

WHEREAS, The American Medical Association, by recent action of its House of Delegates has recommended that the provision of medical care and hospitalization by the Veterans Administration be limited to (1) Veterans with diseases and disabilities which are service-incurred or aggravated, and (2) temporarily to wartime veterans suffering from tuberculosis or neuro-psychiatric disorders of non-service connected origin who are unable to pay the expense of necessary hospitalization; and

WHEREAS, The Missouri State Medical Association is of the opinion that the ultimate objective of the A.M.A. is to develop better utilization of VA hospital facilities and to return those facilities to the use for which they were originally intended, namely, the care of the veteran suffering from disability or disease incurred during his period of service in the nation's armed forces; and

WHEREAS, the MSMA is in full accord with this ultimate objective and with the general principle that medical and hospital care for any citizen, rightfully is the responsibility of the individual and of his state or community, except veterans whose physical or mental state has been impaired by virtue of military service; and

WHEREAS, The rapid growth of the veteran population (now 20 million and increasing by about 1 million each year) is likely to present ever increasing problems in the medical care of veterans; therefore, be it

Resolved, That the Missouri State Medical Association implement an educational campaign, defining the scope of the VA hospital program, which will reach the public and the profession as well.

Resolution on Miscellaneous Medical Services

WHEREAS, Certain medical services, such as x-ray and laboratory examinations and treatments, anesthesia, physical therapy treatments, electrocardiographic and electroencephalographic examinations, radioactive isotope examinations and treatment, blood transfusions, and other medical services, are regularly provided in hospitals under the direction of a physician and are often billed to the patient on the hospital bill with the hospital and the physician concerned having separate financial arrangements, and

WHEREAS, The By-Laws of Blue Shield provide payment only to the physicians for medical services, and

WHEREAS, Blue Shield now pay patients directly for these medical services when a receipted bill is presented, such procedure involving extensive bookkeeping and causing bad public relations in certain instances, and

Dr. R. E. Schlueter greets some members.

WHEREAS, Blue Shield contracts are now being made on a nation-wide basis, and

WHEREAS, It is the desire of all physicians to improve and extend voluntary medical and hospital service plans, therefore, be it

Resolved, That Blue Shield organizations in Missouri may be permitted to pay hospitals directly, with the consent of the county medical society in which the hospital is located, under the following conditions:

(1) There will be an annual authorization filed with Blue Shield and the hospital concerned signed by the physician responsible for that medical service in that hospital identical or similar to the following:

Date....................

I. (name of physician), being responsible for the following services provided in .... hospital, namely .... do hereby authorize Blue Shield to pay said hospital directly for said services for a period of one year from above date, it being understood that I have not or will not render a separate bill for such services either to the patient or to Blue Shield.

(Signed) ....

(2) In those hospitals which do not have a physician directly in charge of the department supplying such medical service, it will be assumed that the Chief of the Medical Staff or the Chief of Medicine and Surgery, whichever service is best suited to take the responsibility, will be allowed to give the above authorization.

(3) This agreement does not apply in those cases where a physician and a hospital have the arrangement whereby the physician renders a separate bill for such medical services.

(4) In those situations where the hospital and/or the physician involved does not wish to enter such an arrangement, Blue Shield shall continue its present methods of payment.

Licensure

In the entire year since the last Annual Session, a major part of the work of the Council has been devoted to seeking a solution to the various public and professional problems that arise from the multiple licensure of physicians of different kinds and of different levels of competence to care or the sick of Missouri. At this time the Council is prepared to report on its work and to recommend to this House of Delegates a course of action which the Councilors unanimously believe to be in the best interest of all the people of the state.

Immediately after the close of last year's Annual Session, at which this basic problem was one of the chief topics considered by the House of Delegates, the Council began intensive study of the matter. To assist and guide the Council in its work, our late President, E. Claude Bohrer, appointed a ten man special committee to draft a program of action. The members of this committee, headed by W. F. Francka of Hannibal, were the following: Sedgwick Mead, St. Louis, chairman of the committee on Physical Medicine; A. P. Rowlette, Moberly, chairman of the Committee on Medical Economics; W. J. Ferguson, Sikeston, chairman of the Committee on Medical Education and Hospitals; A. E. Spelman, Smithville, chairman of the Committee on Rural Medical Service; E. C. Bohrer; H. E. Petersen, Springfield, President-elect of the Missouri State Medical Association; Victor B. Buhler, Kansas City, chairman of the Council; Raymond O. Muether, St. Louis, Councilor of the Third District; Carl F. Vohs, St. Louis, Treasurer of the State Association.

The President chats with some members.

On behalf of the Council, I wish to express the deepest appreciation to the men who served on this committee. They worked hard and came up with a program which, with very minor alterations, won unanimous Council approval. In the course of the entire study, the committee and the Council had continuous legal advice. The executive office staff and our public relations agency all assisted in formulation of the program.

At this time the Council recommends to the House of Delegates the following resolution with the earnest hope that it may have your most careful consideration and approval. In the judgment of the Council, a more important matter has never come before any House of Delegates of this Association.

Resolution

Whereas, The scientific concept of medical education and medical practice has won universal recognition during the last 100 years, and the validity of this concept has been justified by progress in research and therapy unmatched in history; and

Whereas, It is no longer possible for rational men to admit the validity of any approach to medical research and care other than the approach of objective, experimental medical science; and

Whereas, Competence in every area of medical science requires education and training of the most intensive sort; and

Whereas, Practitioners licensed without an adequate background of scientific education and without acceptance and understanding of the discipline of medical science are practitioners not competent to care for the sick in a way the State of Missouri has a moral obligation to require; and

Whereas, At the present time no schools in the State other than university schools of medicine and approved osteopathic schools may reasonably claim that they even approach the necessary level of scientific standards for physician education; now, therefore be it

Resolved, That the Missouri State Medical Association—in recognition of the rights of the people to be served by competent physicians—and in recognition of the need to strive for constant improvement in the quality of medical care available to patients, seek the introduction in the next General Assembly legislation that will achieve the following:

1. Establish a single license that of physician and surgeon. This would mean the elimination of separate licensure for doctors of medicine, osteopaths and chiropractors and the elimination of separate examining boards.

2. Provide machinery for the thorough examination of all candidates in two areas:

(a) A basic science examination to be administered by a section of a new board of medical examiners or by a separate body, as may prove best.

(b) An examination in clinical medicine to be given by the new board of medical examiners or by the appropriate section of the board.

Every candidate for licensure would have to complete successfully both parts of the examination. Provision would be made for qualified candidates to take the basic science examination at the end of their second year of training, or when prepared for it, and to take the clinical section of the examination after graduation.

3. Define academic prerequisites to be fulfilled by candidates before being admitted to either the basic science or clinical section of the examination. Candidates would be accepted from schools approved either by the American Medical Association or the American Osteopathic Association.

4. License successful candidates. All these, whether D.O. or M.D., would be granted licenses to practice as physicians and surgeons. There would be no distinction in the practice rights of licensed practitioners.

5. Permit no other license. With the effective date of the act, no other license in the field of general medical care would be granted by the state. Presently licensed osteopaths would be authorized to practice medicine and surgery. New candidates for licensure, whether M.D., or D.O., would be required to meet the new standards and would receive identical licenses.

Presently licensed chiropractors would be permitted to continue their practice within the limits of the present chiropractic act. The chiropractic board, however, would be abolished, and no new chiropractors would be licensed.

6. Establish broad supervision over standards for licensure in the entire field of health care.

7. Insure proper standards. Qualifications of members of the new board of medical examiners, and the composition of its clinical and basic science components, would be defined by law. M.D.'s and D.O.'s should be represented in proportion to the numbers of both groups in active practice in this state and as listed in the official membership rosters of their respective associations.

Instruction to A.M.A. Delegates

The American Medical Association Board of Trustees has requested delegates to the June session of the A.M.A. to be prepared to answer three specific questions relating to osteopathy. It is the view of the Council that no answers other than those indicated below would be consistent with its recommendations made in the Council's supplementary report.

The questions and the recommended answers follow:

1. Should modern osteopathy be classified as "cultist" healing? Answer: No.

2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education, should doctors of medicine teach in osteopathic schools? Answer: Yes.

3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter for determination by the several state associations? Answer: Yes.

The Council recommends to the House of Delegates that our Delegates to the A.M.A. be instructed to answer these questions in the manner indicated.

Branch Office

The advisability of establishing a branch office of the Association in Jefferson City was considered during the year by the Council and was referred for study to the special committee headed by Dr. Francka. The committee's recommendation that no change be taken at the present time was approved unanimously by the Council. It was the consensus of both committee and Council that in view of the far-reaching legislative program currently contemplated, it would be a mistake to alter the past means of the Association's representation in Jefferson City.

Mr. Speaker, this constitutes a rather lengthy and detailed report. Most of you have copies of this entire supplemental report of the Council mimeographed and in your hands. I hope that you will treat this as more or less restricted, not necessarily confidential information, but not leave it for everyone to get hold of. Read it carefully, because it does represent an extreme amount of work of the members of Dr. Francka's special committee and discussions of the Council.

I don't know yet where the Speaker will assign the report of the Council. He will announce that in just a for greater safety in streptomycin therapy…

DISTRYCIN

Squibb Streptoduocin
Streptomycin and dihydrostreptomycin in equal parts

Distrycin has an important advantage over streptomycin. It has the same therapeutic effect but ototoxicity is greatly delayed. Since the patient is given only half as much of each form of streptomycin as he would have on a comparable regimen of either one prescribed separately, the danger of vestibular damage (from streptomycin) or cochlear damage (from dihydrostreptomycin) is significantly lessened.

Signs of vestibular damage appear in cats treated with Distrycin as much as 100 per cent later than in animals given the same amount of streptomycin.

Cat treated with streptomycin shows no nystagmus after whirling.

Cat given the same amount of Distrycin has normal reflex.

On dosage of 1 Gm. per day for 120 days, ototoxicity was as follows*:

	Vestibular damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	12	6	18
Dihydrostreptomycin	6	0	6
Distrycin	0	0	0
	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

Distrycin is supplied in 1 and 5 Gm. vials, expressed as base

SQUIBB

a leader in streptomycin research and manufacture

'Distrycin'® and 'Nydrazid'® are Squibb trademarks moment, and any of you that might have questions or would like to discuss this problem, particularly that of unified licensure of physicians, I would suggest that you find the meeting room and the time and be there, so that we have a democratic expression of opinion from this House of Delegates.

I feel that this is an extremely important and extremely difficult step to take, and I think we should have unanimous approval. I think we should have everyone expressing their own opinion, so that we can, when we finish our discussions on it, form a unified front and present this to the citizens of Missouri.

Dr. A. N. Arneson was chairman of the Committee on Nominations.

Mr. Speaker and Members of the House, I thank you.

The Speaker referred the report of the Council to the Reference Committee on Reports of Officers.

Guy N. Magness, M.D., University City, President, announced the appointment of the Committee on Nominations as follows:

Committee on Nominations

John R. Dixon, Brookfield.
T. J. Hoerchler, Shelbina.
A. N. Arneson, St. Louis, Chairman.
O. P. Hampton, St. Louis.
James C. Cope, Columbia.
D. R. Edwards, Sedalia.
William C. Mixson, Kansas City.
B. E. DeTar, Joplin.
H. W. Carrington, Lebanon.
W. E. Henrickson, Poplar Bluff.

Paul Baldwin, M.D., Kennett, announced for the delegates from the Tenth Councilor District, that Ben M. Bull, M.D., Ironton, would be recommended to the Council to fill the unexpired term of Frank W. Hall, M.D., Cape Girardeau, resigned.

The Speaker called attention to unfinished business in the form of amendments on the table, pointing out the conflict in the amendments and stating that they had been referred to the Reference Committee on Amendments to the Constitution and By-laws for clarification on the advice of legal counsel. This was accepted by the House of Delegates.

On motion of Henry Allen, M.D., St. Louis, seconded by Daniel L. Sexton, M.D., St. Louis, it was voted 48 to 40 that voting on the Constitutional amendments be by secret ballot.

The Speaker asked for new business to come before the House of Delegates.

Paul R. Whitener, M.D., Overland, presented the following resolution which was referred by the Speaker to the Reference Committee on Resolutions:

WHEREAS, The House of Delegates of the Missouri State Medical Association was scheduled to meet and has met at 10:30 a. m., on Sunday, April 4, 1954; and

WHEREAS, This meeting time was in direct conflict with the usual hours for church worship; and

WHEREAS, Many members of this House of Delegates would have and all should have attended church on Sunday, 4th of April, 1954, if this session had not been called; and

WHEREAS, A meeting of the House of Delegates during the usual Sunday worship hours implies a lack of regard for regular church worship by its members and does not promote favorable public relations; and

WHEREAS, As a secondary consideration, the distance involved for attendance of delegates requires the absence from home and practice of an extra day or portion thereof if the delegates attend a Sunday morning session; therefore be it

Resolved, That at future meetings of the House of Delegates the assembly and opening of the meeting not be scheduled on Sunday morning.

Willard Bartlett, M.D., St. Louis, presented the following resolution which was referred by the Speaker to the Reference Committee on Resolutions:

WHEREAS, It has been shown that fluorine exists naturally in food and water in widely varying amount, and

WHEREAS, It has been shown that increasing the naturally deficient amounts of fluorine in water by simple addition of fluorides results in a decrease in dental caries in the community, and

WHEREAS, Extensive studies by a wide variety of research agencies have failed to show any detrimental effects resulting from water so treated, and

WHEREAS, Fluoridation of municipal water supply has been wholeheartedly and consistently advocated by the United States Public Health Service, the American Dental Association and many other health agencies including the House of Delegates of the American Medical Association, and

WHEREAS, The report of the Water Fluoridation Committee of the St. Louis Medical Society recommending fluoridation of the water supply of the City of St. Louis has been published in MISSOURI MEDICINE, February, 1954, therefore be it

Resolved, That the Missouri State Medical Association go on record as recommending the fluoridation of the water supplies of such communities in the State of Missouri as are shown to be deficient in this element and that copies of this resolution be forwarded to the Governor of the State of Missouri and to the Director of the Division of Health.

Willard Bartlett, M.D., St. Louis, presented the following resolution which was referred by the Speaker to the Reference Committee on Resolutions:

WHEREAS, Good health is a requisite for fulfillment of the duties of high public office, and

WHEREAS, Citizens are entitled to be informed of the presence in candidates of disease states which may lead to important disability during tenure of office, and

WHEREAS, The presidential candidates in 1952 authorized their respective personal physicians to release to the press a report of the candidate's state of health, now, therefore be it

Resolved, 1. That the Missouri State Medical Association endorses the principle that candidates seeking nomination and election to the respective offices of President and Vice President of the United States, United States Senator, United States Congressman and Governor and Lt. Governor of the several states should inform the public of their physical fitness to fulfill the obligations of such office. Be it further

The session broke up slowly.

Resolved, 2. That a copy of this resolution be sent to the Secretary of each of the state medical associations, and that 3. The delegates of the Missouri State Medical Association be instructed to introduce a similar resolution before the

House of Delegates of the American Medical Association at the Annual Session in 1954.

The Speaker announced the place and time of meetings of the reference committees and the House of Delegates recessed at 2:55 p. m. until Monday, April 5, at 4:00 p. m.

MONDAY, APRIL 5, 1954

The House of Delegates convened at 4:00 p. m., April 5, with Victor E. Scherman, M.D., St. Louis, Speaker, presiding.

James R. Meador, M.D., Clayton, reported for the Committee on Credentials.

Sam J. Merenda, M.D., St. Louis, reported for the Reference Committee on Amendments to the Constitution and By-laws.

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Reference Committee on Amendments to the Constitution and By-laws composed of Sam J. Merenda, Chairman, A. R. McComas of Sturgeon, and William C. Mixson of Kansas City, considered the following proposals referred to this committee by the Speaker.

The recommendations contained in the report of the standing Committee on Infant Care as printed on pages 14 and 15 of the booklet entitled "Reports of Officers and Committees" and the report of the Committee on Constitution and By-laws as printed on pages 17 and 18 dealing with the change in the By-laws in order to change the name of the Committee on Infant Care to the Committee on Infant and Child Care, and increasing the number of members on the committee to ten, one from each of the ten Councilor Districts appointed annually by the President, is approved by this committee.

Some conferences continued after the session.

On motion of Dr. Merenda, duly seconded, the amendment was adopted.

Dr. Merenda: The reference Committee also considered the report of the Committee on Public Policy and Public Relations as printed on pages 8 and 9 of the "Reports of Officers and Committees" and the report of the Committee on Constitution and By-laws as shown on page 18 which provides for a change in the number of members on the Committee on Public Policy and Public Relations. The suggestion was to increase the size of the Committee to ten members, one from each of the ten Councilor Districts, with the President, President-Elect and one elected member of the Council to serve as ex-officio members of the Committee. This Committee recommends the adoption of this report, with one change, as follows: "The Committee on Public Policy and Public Relations shall consist of ten members of the Association appointed annually by the President . . ." providing for the terms of office of the members of this Committee.

On motion of Dr. Merenda, duly seconded, this amendment was adopted.

Dr. Merenda: Your Committee has considered three proposals to amend the Constitution, which have been lying on the table since last year. The Reference Committee wishes to call your attention to the supplemental report of the standing Committee on Constitution and By-laws which was presented to you yesterday by the Chairman of that Committee, Dr. Durward G. Hall of Springfield. The recommendations of the Standing Committee are as follow:

Discussions were carried on between sessions.

"1. At the end of Section 2 as printed on page 19 of the booklet "Reports of Officers and Committees" the standing Committee feels that the offices of Secretary and Treasurer are principally administrative offices, that the Council is the administrative body through the greatest part of the year, and that the Council should appoint its own Secretary and Treasurer, selecting the most suitable administrative persons for these offices. Therefore, the Committee recommends to this House of Delegates that it disapprove the amendment to Article VIII, Officers, Section 2."

That is as printed on pages 18 and 19 of the booklet "Reports of Officers and Committees." "The committee, after discussion at the meeting and following correspondence during the year, feels that the terms of Councilors should be left to the individual Councilor districts, that predicated on a local option basis and democratic processes the House of Delegates should not dictate to the individual Councilor Districts what they

Members of the House listened closely.

should do concerning terms of service of their representatives in the executive body of the Association.

"Therefore, the standing Committee suggests to the House of Delegates that it not accept the amendment to limit the terms of office of the Councilors."

3. As printed on page 19 of the booklet "Reports of Officers and Committees" the standing Committee approves the third amendment to the Constitution with the suggestion that the phrase "on or before the last day" be substituted for "prior to" in the interest of consistency between the Constitution and the By-laws. Your Committee in considering these three constitutional amendments recommends that the third amendment dealing with the election of Councilors shall read as follows: "All delegates shall meet on or before the last day of the Annual Session, et cetera."

Your Reference Committee in view of the fact that the third amendment meets with general approval, whereas the other two do not, recommends that the third amendment be considered first. Therefore, Mr. Speaker, your Reference Committee recommends the adoption of the third amendment to the Constitution with the suggestion that the wording "on or before the last day" be substituted for "prior to the last day."

On motion of Dr. Merenda, duly seconded, this amendment was adopted.

Dr. Merenda: Your Committee also considered the ammendment to the Constitution as printed on pages 18 and 19 of the booklet " Reports of Officers and Committees" dealing with the limitation of terms of Councilors and Officers. Your Committee recommends that this amendment be not adopted.

Following motion by Dr. Merenda, duly seconded, Curtis H. Lohr, M.D., St. Louis, was granted the floor and moved that the action of the House on the previous day to have a secret ballot on this amendment be reconsidered. This was seconded and passed.

Dr. Lohr moved that the Constitutional changes be decided upon by a regular voice or standing vote instead of the secret ballot and, on motion, this was voted, by standing vote.

By standing vote, the recommendation of the Reference Committee that the amendment to the Constitution be not adopted was accepted and the amendment was not adopted.

Dr. Merenda: Your Committee considered the amendment that is shown on page 19 of the "Reports of Officers and Committees" dealing with the election of Secretary and Treasurer by the Council. Your Committee recommends that this amendment be not adopted.

On motion of Dr. Merenda, duly seconded, the amendment was not adopted.

On motion of Dr. Merenda, duly seconded, the report of the Reference Committee on Amendments to the Constitution and By-laws was adopted as a whole.

Louis H. Kohler, M.D., St. Louis, presented the report of the Reference Committee on Resolutions as follows:

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

Mr. Speaker, the Committee on Resolutions, composed of Louis H. Kohler, M.D., St. Louis, Chairman; H. W. Carrington, M.D., Lebanon, and Gerald L. Miller, M.D., Kansas City, met and considered the resolution on fluoridation of municipal water supplies. Your Committee recommends the adoption of this resolution.

Dr. Kohler moved the adoption and was duly seconded.

R. Lee Hoffmann, M.D., Kansas City, offered the following amendment: The matter of fluoridation of water by municipalities for public consumption be assigned for further scientific investigation before submission to the House of Delegates for action, this being a project of the Department of Public Health.

Following seconding, the amendment was defeated.

On vote, the resolution was adopted.

Dr. Kohler: Mr. Speaker, your Committee considered the resolution on the physical fitness of candidates seeking nomination for major public offices. The Committee is not in agreement with Dr. Bartlett in thinking that this is in the interest of the public and that it is advisable to adopt such a resolution. It is the recommendation of the Committee that it not be approved.

On motion of Dr. Kohler, duly seconded, this portion of the report was adopted and the resolution not adopted.

Dr. Kohler: Mr. Speaker, your Committee also considered the resolution presented by the Fourth Councilor District dealing with conflict of the House of Delegates with the time of church worship. Your Committee recommends that this resolution be amended to provide that the Council, in adopting a time schedule for future Annual Sessions, arrange the schedule so that it would not be in conflict with the usual hours for church worship.

On motion of Dr. Kohler, duly seconded, this portion of the report was refused adoption by a vote of 47 to 45.

On motion of Dr. Kohler, duly seconded, the report of the Reference Committee on Resolutions, with the exclusion of the one resolution, was adopted as a whole.

The Speaker referred the resolution on conflict of the House of Delegates with the usual hours of church worship back to the Reference Committee on Resolutions for further consideration and recommendation.

T. E. Potter, M.D., St. Joseph, presented the report of the Reference Committee on Miscellaneous Affairs as follows:

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

Mr. Speaker and Delegates: The Committee on Miscellaneous Affairs composed of T. E. Potter, T. E. Ferrell and J. R. Meador met, and the recommendations of the committee are as follows. I beg your indulgence as this Committee seemed to collect a large number of reports which required the action of the House of Delegates. However, for simplicity, if anyone has any objections, instead of each single one being acted upon, it is the wish of the Committee that we present them and we will call for the adoption up to the point as given.

The Committee met and considered the report of the Committee on Scientific and Postgraduate Work, which was printed in the official report of Committees and Officers. The Committee unanimously approved the report of the Committee on Scientific and Postgraduate Work.

The report of the Committee on Publications, as published in the official report of the Committees and Officers, was approved.

The report of the Committee on Defense was approved as published in the "Reports of Officers and Committees."

The report of the Committee on Cancer was accepted and we feel that the Committee on Cancer should continue its efforts to secure screening at the local level, and further suggests that more vigorous attention be paid to the financial status of patients at the county level and by the Social Services of the Ellis Fischel State Cancer Hospital to insure as far as practical that all patients admitted to the hospital are indigent patients afflicted with cancer.

Mr. Speaker, I move you the adoption of the report of the committee to the present reading. The motion was duly seconded and passed.

Dr. Potter: The report of the Committee on Mental Health, as published in the official report of the Committees and Officers, was approved unanimously.

The report of the Committee on Control of Venereal

Disease was unanimously approved as published in the "Reports of Officers and Committees."

The report of the Committee on Industrial Health was approved as published in the "Reports of Officers and Committees."

The report of the Committee on Diabetes, which was not published in the official reports was considered by our committee and the following report was discussed and unanimously approved as follows:

The Committee on Diabetes and representatives of the American Diabetes Association met at the Missouri Hotel, Jefferson City, on March 7. Those present were: William H. Olmsted, M.D., St. Louis, chairman; Lucien W. Ide, M.D., and Richard V. Riddell, M.D., St. Joseph; John K. Caldwell, M.D., Kansas City; Henry E. Oppenheimer, M.D., St. Louis; Helen Penn, of the Missouri State Medical Association office.

Dr. Olmsted outlined the purposes of the meeting as follows: (1) To recommend to the Council of the American Diabetes Association a physician to act as governor for the State of Missouri; (2) discuss the American Diabetes Association plan for organization of a national assembly of laymen and physicians; (3) discussion of the two camps in Missouri for diabetic children.

It was pointed out that the lay organizations on diabetes had always worked through organized medicine and that the American Diabetes Association had been controlled by doctors and that a combined lay and professional organization could be left to the physicians.

It was pointed out that the governor in diabetes in the state could act as sparkplug both for the national organization and for work in the state. It was felt that the best ultimate arrangement was for the governor of the state and the chairman of the Committee on Diabetes of the Missouri State Medical Association to be the same person. Hope was expressed that a unit would be developed in the center part of the state similar to the units now existing in St. Louis and Kansas City.

Dr. Olmsted outlined what he felt should be attempted in Missouri as follows:

1. Present a program every third year at the Annual Session, either as part of the scientific program of the Association or a program on diabetes the day prior to the annual session.
2. The Committee act as a clearing house for speakers throughout the state before both medical and lay groups.
3. Take an active part in the exhibit at the State Fair which the Missouri State Medical Association presents each year.
4. Broaden the scope of the work of the Committee to include endocrine disorders as well as diabetes.
5. Periodically have a special issue of Missouri Medicine devoted to papers on diabetes and endocrine subjects, or symposia for a part of the scientific material.

After discussion, which included time and interest of individuals as well as geographical location, it was decided that Dr. Oppenheimer be recommended to the Council of the American Diabetes Association as governor of the State of Missouri.

Dr. Caldwell outlined the method of handling the camp for diabetic children in Kansas City, saying that it was a part of the Kansas City Park program and that last year twenty-two children spent twelve days in the camp. Dr. Olmsted told of the St. Louis Camp, which is financed principally by the Lions Club but directed by the Diabetic Society.

On motion of Dr. Caldwell, seconded by Dr. Ide, the Committee endorsed the work of the two camps.

Following a dscussion on the best methods of screening, the meeting adjourned.

Mr. Chairman, I move you the adoption of the report to this point. The motion was duly seconded and passed.

Dr. Potter: The report of the Committee on Anesthesiology was unanimously approved as published in the "Reports of Officers and Committees."

The committee recommends that the report of the Committee on Alcoholism be held in abeyance until action of the Council.

The report of the Committee on Physical Medicine was approved unanimously as published in the "Reports of Officers and Committees."

Some in between session conferences were held.

The report of the Committee on Study of Cardiac Disease was approved as follows:

At the meeting of this Committee, and this has not been published, were Drs. E. Lee Shrader, St. Louis, Chairman; A. M. Estes, Cape Girardeau; E. J. McIntire, Carthage; James Janney, St. Louis; Mr. W. G. Green, Executive Secretary, Missouri Heart Association; and Mr. T. R. O'Brien.

The survey of the Children's Convalescent Center, Kansas City, was reviewed. The survey was made on May 17, 1953, following request for such a survey from the Council of Social Agencies of Kansas. The request was approved by the Committee with the provision that the Jackson County Medical Society should approve of the survey being conducted. The Jackson County Medical Society approved of the survey and offered their assistance to the survey group.

The survey committee was composed of E. Lee Shrader, M.D., Chairman; C. W. Meinershagen, M.D., State Division of Health, and Mr. William Charles, President of St. Louis Community Chest. The Committee based its investigation on the following principles:

1. The quality of the medical service rendered at the Convalescent Center.
2. Was the service being rendered by the Convalescent Center a duplication of any other community facilities; if the Convalescent Center was abolished, could any other facilities in Kansas City perform the same function?
3. Were the facilities for care of rheumatic fever adequate without the Children's Convalescent Center?

The survey indicated that the Children's Convalescent Center is well organized, staffed and operated. The Center has received favorable reception by the medical profession of the community. Because the facilities in general hospitals of the community are limited and fully in use, it was apparent that there was no other facility in the area that could render the service given by the Center.

Following the survey, the Center was accepted as an agency by the Community Chest of Kansas City, effective July, 1953.

The State Division of Health has cooperated with a recommendation of the committee and has made available a grant to St. Louis University School of Medicine, Cardiovascular Section. The funds were used to develop programs by the Staff of the University whereby scientific programs were presented before County Medical Societies in cooperation with the Missouri State Medical Association and the Missouri Academy of General Practice.

The Committee hopes to develop a program for lay education in cooperation with the Missouri Heart Association and the Women's Auxiliary to the Missouri State Medical Association.

A series of recordings for use by radio stations, produced by the American Medical Association and the American Heart Association, entitled "Heart of America" were brought to the attention of the Committee. It was agreed that these should be reviewed by the Chairman and other interested individuals and if suitable, should be offered to radio stations by the Missouri Heart Association.

Mr. Speaker, I move you the adoption of the committee's report to this point. The motion was duly seconded and passed.

DR. POTTER: The report of the Committee on Rural Medical Service was unanimously approved as published in the "Reports of Officers and Committees."

The Committee further wishes to commend the chairmen and members of all the aforementioned committees.

Mr. Chairman, I move you the adoption of the report as a whole. The motion was duly seconded and passed.

H. D. Ridings, M.D., Cape Girardeau, presented the report of the Reference Committee on Medical Education and Public Welfare as follows:

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AUD PUBLIC WELFARE

The Committee met and considered the report of the Committee on Health and Public Instruction, which was printed in the official reports of committees and officers. The Committee unanimously approved the report of the Committee on Health and Public Instruction.

The report of the special committee on the American Medical Education Fund which outlined the progress which had been made in encouraging physicians to contribute to the plan for channeling funds into medical education, and it was noted that during the coming year the committee desires to continue the personalized letter solicitation and also to increase the size of the committee in order that every doctor in Missouri will know about it and have an opportunity to contribute to this organization. Your Reference Committee approves of these aims.

The report of the Committee on Medical Economics as published in the official reports was considered by the Reference Committee and it recommends that the Committee on Medical Economics continue its studies relative to the handling of indigent patients at the Missouri University School of Medicine.

The report of the standing Committee on Medical Education and Hospitals, which was not published in the official reports, was considered by your Reference Committee. The following resolution was discussed and unanimously approved:

WHEREAS, The overwhelming majority of doctors in the United States are conscientious, sincere, competent physicians who place welfare of their patients above all else, and

WHEREAS, Physicians in a given local community are cognizant of what hospital staff requirements are necessary for the welfare of patients in that community, and we believe the physicians in that community should have a voice in the regulation of medical affairs in their community, therefore be it

Resolved, That the House of Delegates of the Missouri State Medical Association go on record as approving the Joint Commission on Accreditation of Hospitals as the official body for hospital accreditation, and approve the aims and principles of the Joint Accreditation Commission, and expresses appreciation of the tremendous work done by that body, and be it further

Resolved, That the House of Delegates recommend that closer liaison be established between the Missouri State Medical Association and the national Joint Accreditation Commission for mutual help and coordination, and that this liaison be established through the standing committee on Medical Education and Hospitals of the Missouri State Medical Association; that problems of county medical societies in Missouri be referred to this Committee for study and recommendation.

Mr. Speaker, I move this report be adopted. The motion was duly seconded and passed.

Joseph C. Williams, M.D., Kansas City, presented the report of the Reference Committee on Reports of Officers as follows:

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS

Your Reference Committee on Reports of Officers and Committees considered the Report of the Council which was published in the official booklet "Reports of Officers and Committees," the report of the Secretary as published, the report of the Treasurer as published and the address of the President and President-Elect, and the supplemental report of the Council which was presented by the Chairman yesterday afternoon.

We wish to commend the efforts of the Council, Secretary and Treasurer, and we suggest that the delegates and membership pay close attention to the addresses of the President and President-Elect when they are published later because of the outstanding progressive and courageous contributions that these gentlemen have made to the Association.

Your committee wishes to recommend that all of the reports, including the supplemental Report of the Council, with the exception of the portion dealing with licensure and the portion of the Report dealing with instructions to the delegates to the A.M.A., be approved with a change of the wording in paragraph 3 of the authorization filed with the Blue Cross and the hospital concerned on page 5 of the supplemental Report of the Council. Paragraph 3 will be changed to read as follows: "This agreement does not apply in those cases where the physician renders a separate bill for such medical services."

Mr. Speaker, I move the adoption of this portion of the report. The motion was duly seconded and passed.

DR. WILLIAM: Your Committee has considered, in the supplemental Report of the Council, the portion dealing with instructions to the American Medical Association delegates. The questions and the recommended answers were:

1. Should modern osteopathy be classified as "cultist" healing? Answer: No.

2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education, should doctors of medicine teach in osteopathic schools? Answer: Yes.

3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter for determination by the several state associations? Answer: Yes.

The recommendations of your committee are that action relative to questions No. 1 and No. 2 be indefinitely postponed, and that our Delegates be instructed to vote Yes on Question No. 3.

Mr. Speaker, I therefore move that this delegation indefinitely postpone the action on questions 1 and 2, and instruct the A.M.A. delegates to vote yes on Question No. 3. The motion was duly seconded and passed.

DR. WILLIAMS: The Committee carefully considered the recommendations of the Special Committee and of the Council relative to licensure. We wish to recommend as follows: That the report be accepted as written with the exception of paragraph 5, and your Committee recommends that the third sentence of paragraph 5 be changed from "presently licensed osteopaths would be authorized to practice medicine and surgery" to "presently licensed Doctors of Medicine and Doctors of

Osteopathy would be authorized to practice medicine and surgery."

Mr. Speaker, I move the adoption of this portion of the report dealing with licensure with the mentioned change in paragraph 5. The motion was seconded.

H. W. CARLE, M.D., St. Joseph: Mr. Speaker, in order to get the reaction of a minority group, recognizing the extreme amount of work that has been done by both the committee and the Council, recognizing, too, the folly of procrastination on this important question, and recognizing, thirdly, the extreme importance of such a stand, I move that the report of the Reference Committee on Reports of Officers in regard to the single licensure act be tabled. Following second, on vote, the motion failed.

On vote, the motion to accept the report of the Reference Committee on Reports of Officers carried.

B. M. Stuart, M.D., Boonville, presented the report of the Reference Committee on Scientific Exhibits as follows:

REPORT OF THE REFERENCE COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee recommends to the House of Delegates the following awards:

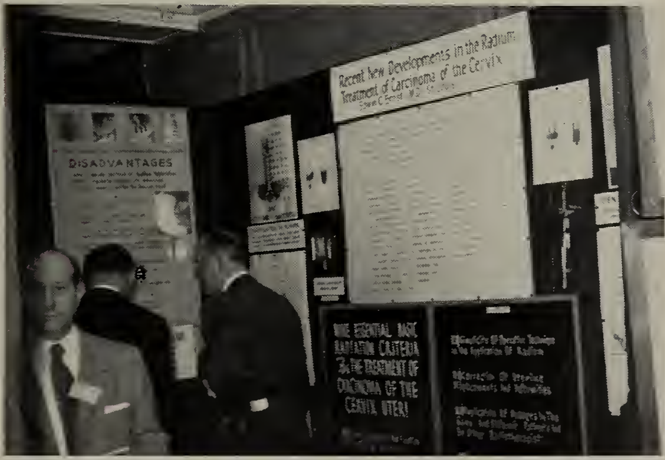
First, "Recent New Developments in the Radium Treatment of Carcinoma of the Cervix," Edwin E. Ernst, M.D., St. Louis.

Second, "Repair of Facial Deformities, Including Including Internal Wire Fixation of Fractures," James Barrett Brown, M.D., Minot P. Fryer, M.D., and Frank S. McDowell, M.D., St. Louis.

Third, "Cancer of the Colon and Rectum," Robert W. Bartlett, M.D., St. Louis.

On motion of Dr. Stuart, duly seconded, these recommendations were accepted.

B. E. DeTar, M.D., Joplin, presented the report of the Reference Committee on Technical Exhibits as follows:


Recent New Developments in the Radium Treatment of Carcinoma of the Cervix
DISADVANTAGES

Scientific exhibit of Dr. E. C. Ernst won first award.

REPORT OF THE REFERENCE COMMITTEE ON TECHNICAL EXHIBITS

The Committee recommends to the House of Delegates the following awards:

First, Parke, Davis & Company, Detroit.

Second, Pet Milk Company, St. Louis.

Third, Ciba Pharmaceutical Products, Inc., Summit, N. J.

On motion of Dr. DeTar, duly seconded, these recommendations were accepted.

SAM J. MERENDA, M.D., St. Louis: I would like to offer the following amendment to the By-laws: Amend Chapter IV of the By-laws, page 9, by adding a new section to read as follows: "Sec. 6. The Speaker shall appoint a parliamentarian to serve as such during the session of the House of Delegates at each annual meeting, upon whom the Speaker may call before deciding points of order or procedure."

This was referred by the Speaker to the Reference Committee on Amendments to the Constitution and By-laws.

A. R. MCCOMAS, M.D., Sturgeon: I desire to call the attention of the House of Delegates to the serious sickness of four former Presidents of the Association with the hope that you will instruct the Secretary to send them an appropriate greeting. These are Dr. Nifong of Columbia, Dr. Harrison of Mexico, Dr. Ryland of Lexington, Dr. McAlester of Kansas City.

PARKE, DAVIS & CO.
RESEARCH

Parke, Davis & Co. won first award in Technical Exhibits.

This was referred by the Speaker to the Reference Committee on Resolutions.

The Speaker asked that the House of Delegates stand for a moment of silence in memory of Dr. E. Claude Bohrer and all other members who have become deceased during the last year.

On motion, duly seconded, the House of Delegates adjourned at 5:15 p. m.

WEDNESDAY, APRIL 7, 1954

The House of Delegates convened at 1:30 p. m., April 7, with the Speaker, Victor E. Scherman, M.D., St. Louis, presiding.

James Meador, M.D., St. Louis, reported for the Committee on Credentials.

On motion of W. W. Tillman, M.D., Springfield, the roll call was dispensed with.

On motion of Dr. Tillman, duly seconded, the reading of the minutes was dispensed with.

A. N. Arneson, M.D., St. Louis, presented the report of the Committee on Nominations as follows:

REPORT OF THE COMMITTEE ON NOMINATIONS

For Vice Presidents: B. L. Murphy, M.D., Hannibal; Edwin C. Ernst, M.D., St. Louis; R. Lee Hoffmann, M.D., Kansas City.

For Delegates to the American Medical Association: A. S. Bristow, M.D., Princeton; alternate, W. J. Shaw, M.D., Fayette. Durward G. Hall, M.D., Springfield; alternate, Guy N. Magness, M.D., University City.

For Speaker of the House of Delegates: Victor E. Scherman, M.D., St. Louis; Vice Speaker, Joseph L. Fisher, M.D., St. Joseph.

On motion, duly seconded, these officers were declared elected.

Sam J. Merenda, M.D., St. Louis, presented the report of the Reference Committee on Amendments to the Constitution and By-laws as follows:

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Mr. Speaker, your Committee has considered the amendment to the By-laws, which has lain on the table for one day, and recommend its adoption as follows: Amend Chapter IV, by adding a new section to read "Sec. 6. The Speaker shall appoint a parliamentarian to serve as such during the session of the House of Delegates at each annual session and upon whom the Speaker may call before deciding points of order or procedure."

Upon motion of Dr. Merenda, duly seconded, the amendment was adopted.

Louis H. Kohler, M.D., St. Louis, presented the report of the Reference Committee on Resolutions, as follows:

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

Mr. Speaker, the Committee on Resolutions has again considered the resolution submitted by the Fourth Councilor District relating to Annual Session meeting schedules and Sunday church services. It is your Committee's decision to refer this back to this House without offering any recommendations on the question it raises.

On motion of Dr. Kohler, duly seconded, this portion of the report was adopted.

DR. KOHLER: Your Committee was instructed to prepare a resolution to take note of the illness of four Past Presidents of the Association. We wish to submit for your consideration the following resolution:

WHEREAS, This Association is conscious of the very great debt it owes to those who have served as our Presidents—men whose services have contributed so much to the Association's success over the years, and

WHEREAS, It has come to our attention that four of our beloved Past Presidents are ill and have been unable to attend our Annual Session, now therefore be it

Resolved, That this Association go on record as noting, and regretting very deeply, the absence of the following Past Presidents: C. T. Ryland, Lexington; A. W. McAlester, Jr., Kansas City; Frank G. Nifong, Columbia, and J. F. Harrison, Mexico, and be it further

Resolved, That the Secretary communicate to each of these physicians the expression of the Association's best wishes for a speedy recovery.

On motion of Dr. Kohler, duly seconded, the resolution was adopted.

The Speaker asked that the resolution returned by the reference committee be presented for discussion.

On motion of Paul R. Whitener, M.D., Overland, duly seconded, the resolution was adopted.

Victor B. Buhler, M.D., Kansas City, Chairman of the Council, was granted the floor. He pointed out that the planning and timing of the Annual Session was an administrative procedure but it was the wish to please the members of the House of Delegates; that the 1954 schedule had been arranged as it was because of resolutions introduced at the 1953 Annual Session objecting to conflicts with the scientific program. He asked for a vote of the House of Delegates on the day of the week and the time of day they wished the House to meet to guide the Council in its planning. On vote, the decision was that the House of Delegates, together with reference committees, should meet on Sunday following the usual church worship hour.

Victor B. Buhler, M.D., Kansas City, presented the report of the Council as follows:

REPORT OF THE COUNCIL

Mr. Speaker: There are two items considered by the Council which should be mentioned as information to the House of Delegates.

At the recommendation of the delegates from the 10th Councilor District, Dr. Ben M. Bull, Ironton, was appointed as Councilor for the 10th District to serve the unexpired term of Dr. Frank Hall, Cape Girardeau.

We are in receipt of a letter from the A.M.A. regarding the principles of medical ethics relating to physicians fees, with a questionnaire, which has been referred to the Committee on Medical Economics for consideration and report.

The Speaker of the House referred to the Council the report of the Committee on Alcoholism which contained the following recommendation, printed on page 28 of the booklet, "Reports of Officers and Committees": "That the Committee on Alcoholism be instructed to formulate and promote with the assistance of the Association's Executive Office and its officers, necessary legislation that will provide for a special hospital for the chronically ill to be located at Columbia in close relationship with the teaching and research activities of the University of Missouri Medical School which will principally serve as a research and clinical center for the study and care of alcoholic patients."

The Council considered the recommendation and with the approval of the Chairman of the Committee on Alcoholism adopted a substitute recommendation reading as follows: "That the Committee on Alcoholism be instructed to formulate and promote, with the assistance of the Association's Executive Office and its officers, necessary legislation to provide for a commission on alcoholism."

Mr. Speaker: I recommend that this portion of the report be adopted.

On motion, duly seconded, this was adopted.

The report of the Committee on Alcoholism also contained a recommendation that the Committee on Alcoholism compile an informative report concerning alcoholism in Missouri. This report is found on pages 28 and 29 of the "Reports of Officers and Committees." The Council recommends that the Committee on Alcoholism compile such a report.

Mr. Speaker: I recommend that this portion of the report be adopted.

On motion, duly seconded, this was adopted.

The Report of the Committee on Conservation of Eyesight, published on pages 19 and 20 of the official reports, was referred by the Speaker to the Council. Immediate action is not required and the Council recommends that the implementation of the report be left to the discretion of the Council and its Committee on Legislation.

Mr. Speaker: I recommend that this portion of the report be approved.

On motion, duly seconded, this portion of the report was approved.

Mr. Speaker: I recommend that the Report of the Council be adopted as a whole.

On motion, duly seconded, the Report of the Council was adopted as a whole.

DR. BUHLER: Mr. Speaker and Members of the House of Delegates: In light of the action taken by the House of Delegates relative to the uniform medical practice act for Missouri, an informative letter will be prepared within the next few days which will be sent to all members of the Association. The letter will outline in detail the nature of the action taken and the plan of action in activating the program. Each member of the Association should carefully read this letter and should be guided by its content. Thank you very much.

Joseph L. Fisher, M.D., St. Joseph, Vice Speaker, announced the following reports of election of Councilors: First District, Donald M. Dowell, M.D., Chillicothe, reelected; Third District, Raymond O. Muether, M.D., St. Louis, reelected; Fifth District, J. Loren Washburn, M.D., Versailles, reelected; Seventh District, Richard H. Kiene, M.D., Kansas City; Ninth District, J. H. Summers, M.D., Lebanon, reelected; Tenth District, Ben M. Bull, M.D., Ironton, to fill the unexpired term of

Frank W. Hall, M.D., Cape Girardeau, resigned.

William C. Mixson, M.D., Kansas City, nominated Victor B. Buhler, M.D., Kansas City, for President-Elect.

Upon motion the Secretary was instructed to cast the unanimous ballot of the House of Delegates for Victor B. Buhler, M.D., Kansas City, for President-Elect. The Secretary cast the unanimous ballot of the House of Delegates for Dr. Buhler for President-Elect and the Speaker declared Dr. Buhler so elected.

VICTOR B. BUHLER, M.D., Kansas City: Mr. Speaker and members of the House of Delegates: One cannot be too closely associated with MSMA and not know something about who might be the officers. In spite of this the actual election by the House as your President-Elect is one of the greatest honors that has ever been bestowed upon me. I am supremely humble in accepting this office. I know the problems. Your predecessors have set an example that makes it extremely difficult. I am highly appreciative of the confidence that you have placed in me and I am honored by your action. I thank you very much.

Frank B. Leitz, M.D., Kansas City, invited the Association to meet in Kansas City in 1955 with the Jackson County Medical Society as host.

Dr. Victor B. Buhler, President-Elect, was escorted to the platform.

On motion, duly seconded, this invitation was accepted.

H. E. Petersen, M.D., St. Joseph, was installed as President, as were other newly elected officers.

On motion of W. W. Tillman, M.D., Springfield, duly seconded, a vote of thanks was given the St. Louis committees for their arrangements and hospitality.

H. E. Petersen, M.D., St. Joseph, read the appointment to committees to fill expired terms and chairmenships, which were approved by the House of Delegates, as follow:

Scientific and Postgraduate Work: Maxwell G. Berry, Kansas City, Chairman; Alphonse McMahon, St. Louis; Roy W. Pearse, Jr., Nevada. Associate Members: Michael S. Wepprich, Washington; Chester L. Clark, Trenton; Allen I. Herman, St. Joseph; Charles F. Wilson, Cape Girardeau; Peter G. Siegel, Smithton; Carroll P. Hungate, Kansas City; Eugene M. Bricker, St. Louis; Charles E. Martin, St. Louis.

Defense: C. E. Hyndman, St. Louis, Chairman.

Public Policy and Public Relations: Jerome I. Simon, St. Louis, Chairman; T. E. Potter, St. Joseph; T. J. Hoerchler, Shelbina; Russell J. Crider, St. Charles; J. W. Allee, Columbia; Rolla B. Wray, Nevada; Ralph Perry, Kansas City; O. B. Crawford, Springfield; H. W. Carrington, Lebanon; D. Rusby Seabaugh, Cape Girardeau. H. E. Petersen, St. Joseph, President; Victor B. Buhler, Kansas City, President-Elect, and W. F. Francka, Hannibal, member of the Council, ex-officio.

Medical Education and Hospitals: W. J. Ferguson, Sikeston, Chairman; Ralph R. Coffey, Kansas City. Associate Members: M. E. Grimes, St. Joseph; George J. L. Wulff, University City.

Cancer: E. C. Ernst, St. Louis, Chairman; E. Kip Robinson, Kansas City; Joseph L. Fisher, St. Joseph. Associate Members: Jack H. Hill, Kansas City; Frederick J. McCoy, Kansas City; George A. Carroll, St. Louis; George L. Watkins, Farmington.

The new President-Elect addressed the House.

Medical Economics: A. P. Rowlette, Moberly, Chairman; Arthur B. Smith, Kansas City; E. A. Stricker, St. James. Associate Members: J. H. Trolinger, Jackson; John R. Forgrave, St. Joseph.

Mental Health: Thomas Thale, St. Louis, Chairman; W. J. Cremer, Fulton. Associate Members: Henry V. Guhleman, Jr., Jefferson City; Orr Mullinax, St. Joseph.

Maternal Welfare: Kenneth E. Cox, Kansas City, Chairman; J. L. Johnston, Springfield. Associate Members: G. L. Miller, Kansas City; William See, Columbia; James E. Keeler, Kansas City; Helman C. Wasserman, St. Louis; John E. Burch, Joplin; Francis R. Burns, Hannibal; Charles M. Grace, Chillicothe.

Infant and Child Care: Daniel B. Landau, Hannibal, Chairman; Roy F. Garrison, Kansas City; Raymond J. LaDriere, St. Louis; Guy N. Magness, University City; H. Ewing Wachter, St. Joseph; O. B. Barger, Harrisonville; Jack N. Wiles, West Plains; W. E. Henrickson, Poplar Bluff; Eugene J. Schwartz, Springfield; John S. Sennott, Jefferson City.

Dr. Frank B. Leitz invited the Association to meet in Kansas City in 1955.

Health and Public Instruction: A. W. McAlester, III, Kansas City, Chairman; Edgar A. Belden, Jefferson City; Henry C. Willumsen, St. Joseph; and John T.

Crowe, Cape Girardeau, to fill out the unexpired term of Guy V. Everist who is out of the state.

Constitution and By-laws: Paul Baldwin, Kennett, Chairman; W. A. Bloom, Fayette.

Fractures: Jacob Kulowski, St. Joseph, Chairman; Paul W. Meyer, Kansas City; W. J. Stewart, Columbia. Associate Members: Henry C. Bauman, Maryville; B. L. Murphy, Hannibal; Thomas G. Otto, Cape Girardeau; Ralph K. Earp, St. Louis; O. P. Hampton, St. Louis.

New officers were installed.

Conservation of Eyesight: C. Souter Smith, Springfield, Chairman; Robert S. Minton, St. Joseph. Associate Members: John McLeod, Kansas City; G. J. Tygett, Cape Girardeau; George Hornback, Hannibal; C. H. Brady, Sedalia; Theodore Sanders, St. Louis; D. E. Eggleston, Macon; A. A. Drake, Rolla; William B. Wilcoxen, Bowling Green; W. L. Post, Joplin.

Control of Venereal Disease: E. M. Cannon, St. Louis, Chairman; William B. O'Connor, St. Joseph. Associate Members: R. J. Murphy, Kansas City; W. L. Davis, Charleston.

Industrial Health: H. M. Roebber, Bonne Terre, Chairman; Albert H. Muench, St. Joseph.

Diabetes: William H. Olmsted, St. Louis, Chairman; Charles M. Lamke, Columbia; Henry E. Oppenheimer, St. Louis, and Ira C. Layton, Kansas City, to fill the unexpired term of Blaine Z. Hibbard, Kansas City, resigned. Associate Members: Vincent J. LoPiccolo, St. Louis; Robert E. Koch, Clayton; Ralph H. Jones, Marshall; Byron M. Stuart, Boonville.

The Council met following the House of Delegates.

Anesthesiology: Merritt H. Kimball, Kansas City, Chairman; Carl K. Ness, St. Joseph; W. W. Tillman, Springfield. Associate Member: O. T. Blanke, Joplin.

Hospital and Professional Relations: Hollis Allen, St. Louis, Chairman; Stanley S. Peterson, Springfield; Charles M. Waggoner, Columbia; Milton Shoss, Cape Girardeau, to fill the unexpired term of C. G. Stauffacher, Sedalia, resigned.

Physical Medicine: Sedgwick Mead, St. Louis, Chairman; Herbert A. Hamel, Kansas City.

Tuberculosis: Paul Murphy, St. Louis, Chairman; I. J. Flance, St. Louis; E. E. Glenn, Springfield; Laurence E. Wood, Kansas City; J. L. Mudd, St. Louis; C. A. Brasher, Mount Vernon; W. P. McDonald, St. Joseph; F. E. MacInnis, Kansas City; H. L. Greene, Hannibal.

Study of Cardiac Disease: E. Lee Shrader, St. Louis, Chairman; E. J. McIntire, Carthage; A. M. Estes, Cape Girardeau. Associate Members: Earl L. Loyd, Jefferson City; W. I. Park, Springfield; G. R. Hudson, Kirksville; Arthur E. Strauss, St. Louis; J. Will Fleming, Moberly.

Alcoholism: Ralph E. Duncan, Kansas City, Chairman; S. D. Smith, Columbia; Kenneth C. Coffelt, Springfield; Joseph B. Kendis, St. Louis; George W. Forman, St. Joseph; Richard W. Maxwell, University City.

Laboratory Medicine: Richard V. Riddell, St. Joseph, Chairman; B. C. Portuondo, St. Louis.

Rural Medical Service: A. E. Spelman, Smithville, Chairman; Francis L. Kozal, Belle; W. A. Broyles, Bethany; W. J. Shaw, Fayette; Joseph C. Creech, Troy; Charles H. Lewellen, Louisiana; C. A. McBurney, Slater; A. J. C. McCallum, Aurora; John J. Killion, Portageville.

The House of Delegates, upon motion duly seconded, adjourned *sine die* at 2:15 p. m.

THE COUNCIL

The Council met on April 7, immediately following adjournment of the House of Delegates, H. E. Petersen, M.D., St. Joseph, President, presiding.

Ben M. Bull, M.D., Ironton, was greeted as the new Councilor from the Tenth Councilor District. Richard H. Kiene, M.D., Kansas City, new Councilor for the Seventh Councilor District, was not present. Donald M. Dowell, M.D., Chillicothe; R. O. Muether, M.D., St. Louis; J. Loren Washburn, M.D., Versailles, and J. H. Summers, M.D., Lebanon, were welcomed as reelected to the Council.

The following officers were elected: W. S. Sewell, M.D., Springfield, Chairman; Raymond O. Muether, M.D., St. Louis, Vice Chairman; E. Royse Bohrer, M.D., Jefferson City, Secretary; Carl F. Vohs, M.D., St. Louis, Treasurer.

The time and place of the next meeting was left to the Chairman of the Council and the Executive Secretary.

REGISTRATION AT THE NINETY-SIXTH ANNUAL SESSION

First Councilor District—29

Allen, E. W., Carrolton
Bristow, A. S., Princeton
Bristow, Robert B., St. Joseph
Carle, H. W., St. Joseph
Craig, Owen W. D., St. Joseph
Cullers, C. H., Trenton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Durham, S. L., Dearborn
Fisher, Joseph L., St. Joseph
Gearhart, Merriam, Bethany
Brace, Charles M., Chillicothe
Herman, Allen I., St. Joseph
Hodge, Robert H., North Kansas City
Imes, E. D., Maryville
Jackson, W. R., Maryville
Kulowski, Jacob, St. Joseph
McDaniel, John R., St. Joseph
Matteson, Frank B., Grant City
Nixon, Edward E., Gallatin
O'Connor, Wm. B., St. Joseph
Petersen, H. E., St. Joseph
Potter, T. E., St. Joseph
Riddell, Richard V., St. Joseph
Rost, Wm. B., St. Joseph
Schroeder, S. O., Liberty
Senor, S. E., St. Joseph
Spelman, A. E., Smithville
Wadlow, E. E., St. Joseph

Second Councilor District—29

Anderson, D. W., Moberly
Andrae, Robert L., Louisiana
Canella, H. M., Hannibal
Cohrs, C. C., Moberly
Fleming, J. W., Moberly
Fleming, Thomas S., Moberly

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Kansas City
Saint Louis

Francka, W. F., Hannibal
Freeman, Spencer L., Kirksville
Greene, Harry L., Hannibal
Hamlin, Wyeth, Palmyra
Hardesty, J. W., Hannibal
Hawkins, George W., Salisbury
Hoerchler, T. J., Shelbina
Jennings, P. W., Canton
Johnson, Edward M., Macon
Kibbe, John H., Monroe City
Landau, Daniel B., Hannibal
Lewellen, Chas. H., Louisiana
Middleton, John W., Louisiana
Miltenberger, Val. E., Kirksville
Petty, W. S., Macon
Roller, M. J., Hannibal
Rowlette, A. P., Moberly
Smith, W. J., Hannibal
Strong, Richard M., Hannibal
Sultzman, Francis E., Hannibal
Szymanski, S., Moberly
Weger, Carl C., Keytesville
Wilcoxen, W. B., Bowling Green

Third Councilor District—222

Abell, Walter E., St. Louis
Aldrich, James T., St. Louis
Allen, Duff S., St. Louis
Allen, Henry C., Clayton
Allen, Hollis N., St. Louis
Allen, William E., Jr., St. Louis
Althaus, Carl J., St. Louis
Arneson, A. N., St. Louis
Arnold, Eugene L., St. Louis
Banet, S. R., St. Louis
Banton, William C., St. Louis
Bartlett, Robert, St. Louis
Bartlett, Willard, St. Louis
Baumgarten, Walter, St. Louis
Becker, Edward J., St. Louis
Beckette, E. S., St. Louis
Bergman, H. F., St. Louis
Berry, John W., St. Louis
Boemer, L. C., St. Louis
Bohne, W. R., St. Louis
Bowerman, Harold H., St. Louis
Bowersox, W. A., St. Louis
Bromberg, Leon, St. Louis
Brown, James Barrett, St. Louis
Bruce, Helen L., St. Louis
Bryan, James H., St. Louis
Buddy, Edward P., St. Louis
Burford, C. E., St. Louis
Burford, E. H., St. Louis
Burke, Robert J., Scott A.F.B., Ill.
Burns, Francis J., St. Louis
Caciappo, Joseph E., St. Louis
Campbell, Cecil S., St. Louis
Carroll, George A., St. Louis
Carroll, Grayson, St. Louis
Cassel, M. A., St. Louis
Cason, Elbert H., St. Louis
Chamness, James T., St. Louis
Charnas, R. M., St. Louis
Conrad, A. H., St. Louis
Conrad, Marshall B., St. Louis
Cook, Ralph L., St. Louis
Costello, Joseph P., Jr., St. Louis
Creane, John C., St. Louis
Daake, John W., St. Louis
Dalton, Arthur R., St. Louis
Davis, Martin W., St. Louis
Devine, John B., St. Louis
Dorsett, E. Lee, University City
Eckert, Charles, St. Louis
Edwards, Joseph C., St. Louis
Ellersieck, Dorothy M., St. Louis
Ernst, Edwin C., St. Louis
Ernst, Edwin C., Jr., St. Louis
FitzGerald, Leo P., University City
Ford, L. T., Jr., St. Louis
Fox, Robert E., St. Louis
Franklin, Max S., St. Louis
Freund, Newton M., St. Louis
Freund, Samuel J., St. Louis
Fries, Armand D., St. Louis
Fryer, Minot P., St. Louis
Furla, G. J., Brentwood
Gafney, George T., St. Louis
Glaser, Martin J., St. Louis
Glenn, Joseph E., St. Louis
Graul, W. P., St. Louis
Grogan, F. M., St. Louis
Guccione, Joseph B., St. Louis
Gunn, Walter T., St. Louis
Haddock, James N., Webster Groves
Hammond, John J., St. Louis
Hampton, Stanley F., St. Louis
Hanlon, C. Rollins, St. Louis
Hardy, Joseph A., Jr., St. Louis
Harell, Alex, St. Louis
Harmann, M. F., St. Louis
Hawkins, George L., Jr., St. Louis
Haynes, Pugh, St. Louis
Henschel, Eugene V., St. Louis
Hewitt, Walter R., University City
Hobart, Carl, St. Louis
Holden, R. F., Jr., St. Louis
Holdenried, W. E., St. Louis
Hollo, Vencel W., St. Louis
Hutton, J. Lewis, St. Louis
Hyndman, Charles E., St. Louis
James, Norman A., St. Louis
Javaux, Everett J., St. Louis
Jensen, J. Ernest, St. Louis
Jesgar, William, St. Louis
Jones, A. B., St. Louis
Jones, Otey S., St. Louis
Jones, Vincent L., St. Louis
Karandjeff, A. D., St. Louis
Keller, Louis, Clayton
Kelly, Chas. A., St. Louis
Kenamore, Bruce, St. Louis
Kerr, David N., St. Louis
Key, J. Albert, St. Louis
Keyes, E. L., St. Louis
Kinsella, Dalton L., St. Louis
Kinsella, Ralph A., St. Louis
Kirchner, Walter C. G., St. Louis
Klein, Arnold G., St. Louis
Klein, Bert H., St. Louis
Klein, Harry A., St. Louis
Klippel, B. W., St. Louis
Klym, Nicholas, St. Louis
Kneal, Ellsworth H., St. Louis
Kohler, Louis H., St. Louis
Koon, Bernard T., St. Louis
Kountz, William B., St. Louis
Kouri, Martin F., St. Louis
Koutsoumpas, Wm. V., St. Louis
Kraft, Edward O., Brentwood
Kuebrich, T. C., Ferguson
Kurz, R. F., St. Louis
Lanier, Earl W., St. Louis
Larsen, Kenneth V., St. Louis
Lee, E. J., Jr., St. Louis
Loeb, Virgil, Jr., St. Louis
Lohr, Curtis H., Clayton
Lowenstein, Paul S., St. Louis
Luedde, Philip S., St. Louis
McMahon, Alphonse, St. Louis
Macko, J. R., St. Louis
Macon, Wm. L., St. Louis
Malles, A. Conrad, St. Louis
Mannis, Ben G., St. Louis
Martin, Charles E., St. Louis
Mastin, E. Vernon, St. Louis
Max, C. O. C., St. Louis
Max, Paul F., St. Louis
Merenda, Sam J., St. Louis
Moeller, Carl E., St. Louis
Montani, Charles, St. Louis
Moore, Neil S., St. Louis
Moore, Walter L., St. Louis
Morris, Harvey E., St. Louis
Morris, Mary E., St. Louis
Mueller, Robert, St. Louis
Muether, R. O., St. Louis
Munsch, Girard A., Clayton
Neilson, A. W., St. Louis
Newman, Percy, St. Louis
O'Dowd, James A., St. Louis
Ogura, Joseph H., Brentwood
Orrahood, M. David, St. Louis
Paletta, Francis X., St. Louis
Peden, Joseph C., St. Louis
Pfeifer, Oliver C., St. Louis
Pollock, Ellis L., St. Louis
Pranger, S. H., St. Louis
Pruett, Burchand S., St. Louis
Quinn, Abram T., St. Louis
Raemdonck, A. J., St. Louis
Rendleman, George F., St. Louis
Repetto, Albert, St. Louis
Rice, Earl R., St. Louis
Ries, Douglas A., St. Louis
Riordan, L. M., St. Louis
Ritchie, Frances R., St. Louis
Roulhac, George E., St. Louis
Ruddell, George W., St. Louis
Ryan, Robert E., St. Louis
Sale, Llewellyn, Jr., St. Louis
Sante, L. R., St. Louis
Sargent, Frederick K., St. Louis
Sauer, W. N., St. Louis
Saxton, John A., Jr., St. Louis
Scherman, Victor E., St. Louis
Schlueter, R. E., St. Louis
Schmidt, Edmund M., St. Louis
Schnoebelen, P. C., St. Louis
Scholz, R. Philip, St. Louis
Schuchat, W. Louis, St Louis
Sciortino, John S., St. Louis
Scott, Elwin P., St. Louis
Scott, Wendell G., St. Louis
Seddon, John W., St. Louis
Sewing, A. H., St. Louis
Sexton, Daniel L., St. Louis
Shackelford, H. H., St. Louis
Shutt, Cleveland H., St. Louis
Signorelli, A. J., St. Louis
Sisk, James, Clayton
Smith, Herbert P., St. Louis
Smith, J. Earl, St. Louis
Steiner, A. J., St. Louis
Stephenson, Hugh E., Jr., Columbia
Stolar, Jacob, St. Louis
Stone, Charles A., St. Louis
Stryker, Garold V., St. Louis
Talbott, Hudson, St. Louis
Tess, Melvin, St. Louis
Thompson, J. W., St. Louis
Thompson, Lawrence D., St. Louis
Titterington, P. F., St. Louis
Tjoflat, Oliver E., St. Louis
Tomlinson, W. L., St. Louis
Trotter, Francis O., St. Louis
Uhlemeyer, H. A., Sr., St. Louis
Vaughn, A. N., St. Louis
Vohs, Carl F., St. Louis
Wagenbach, W. F., St. Louis
Waickman, Francis J., Scott A.F.B., Ill.
Walton, Franklin E., Clayton
Wasserman, Helman C., St. Louis
Webb, L. M., St. Louis
Weintraub, S. A., St. Louis
Weir, Don C., St. Louis
Weis, Matthew W., St. Louis
Weiss, Richard S., St. Louis
Wentzel, L. R., St. Louis
Westerman, Henry C., St. Louis
Weyerich, L. F., St. Louis
Wilcox, C. V., St. Louis
Wilhelmi, Otto J., St. Louis
Winter, Tyrus D., St. Louis
Wippo, Edgar W., St. Louis
Woolsey, Robert D., St. Louis
Zahorsky, John, Steelville

Fourth Councilor District—89

Armstrong, John H., Kirkwood
Backlar, Joseph, Richmond Heights
Bailey, W. H., St. Louis
Berger, Edward J., Clayton
Bernstorff, Paul H., St. Louis
Berwald, I. I., St. Louis
Brenner, Paul A., Owensville
Brown, William S., University City
Crawford, Robert M., Sullivan
Davis, E. W., St. Louis
de la Torre, John J., Sullivan
Denny, R. B., University City
Diehr, Maurice A., St. Louis
Dowd, James F., St. Louis
Fallet, Charles E., DeSoto
Farris, H. G., Normandy
Finkel, Barney W., St. Louis
Fletes, James W., Normandy
Forsman, W. W., Sappington
Gollub, Samuel W., St. Louis
Gowen, Leo, Webster Groves
Grundmann, W. H., St. Louis
Hagemann, Paul O., St. Louis
Hampton, O. P., St. Louis
Hendin, Aaron, University City
Howe, Louis F., Brentwood
Huck, Frank, Fenton
Hughes, Robert G., Creve Coeur
Irick, Carl C., Webster Groves
Johnson, G. C., Marthasville
Jones, Augustin, St. Louis
Keller, Robert M., Owensville
Kendis, Joseph B., Ladue
Kingsland, Robert C., Clayton
Kister, George E., St. Charles
Koch, Otto W., Clayton
Kopp, Jules H., St. Louis
Leslie, C. H., Glendale
Levey, S. A., St. Louis
Lewin, Wilbur H., Kirkwood
Magness, Guy N., University City
Mahe, George A., St. Louis
Mayfield, J. L., Washington
Meador, James R., Clayton
Muench, L. O., Washington
Muschany, Norman K., Troy
O'Connell, John, Overland
Ot, Harold J., Maplewood
Pawol, S. E., Overland
Pearl, John F., St. Clair
Penn, R. M., Silex
Peterson, Merle H., Sullivan
Pfeffer, Robert C., St. Louis
Poggemeier, William H., St. Charles
Reeves, G. A., St. Charles
Reilly, Pierce J., St. Louis
Richardson, W. R., Union
Roblee, Melvin A., Clayton
Rutledge, John F., Crystal City
Ryan, John B., Hermann
Schattyn, Martyn, St. Louis
Schmidt, C. A., Washington
Schmidt, H. H., Marthasville
Senn, E. J., Herculaneum
Sharp, Cecil A. Z., St. Louis
Spitzer, Ernest, University City
Stein, H. J., St. Louis
Steinbeck, H. D., Union
Sterling, John A., Maplewood
Stewart, Frances H., University City
Strehlman, B. G., Union
Stuebner, Roland W., Brentwood
Teiber, Fred W., St. Louis
Toms, Stephen, St. Louis
Vinyard, Paul, St. Louis
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Vizgird, J. J., St. Louis
Wall, Albert, Jennings
Walther, Roy A., Overland
Weitman, Maximilian, St. Louis
Wepprich, Michael S., Washington
Whitener, Paul R., Robertson
Williamson, O. E., St. Louis
Wulff, George, St. Louis
Wyatt, Lois C., Kirkwood
Yoskit, Harry, Festus
Yost, Walter B., St. Louis
Young, John S., St. Louis

Fifth Councilor District—52

Allee, James W., Columbia
Allee, W. L., Eldon
Allen, H. E., Columbia
Allen, William C., Glasgow
Amos, James R., Jefferson City

Andersen, E. J. T., Montgomery City
Atkins, James A., Columbia
Belden, E. A., Jefferson City
Bloom, W. A., Fayette
Bohrer, E. Royse, Jefferson City
Bruner, Claude R., Columbia
Clark, Kendall A., Fulton
Cooper, Maurice E., Columbia
Cope, James C., Columbia
Crews, R. N., Fulton
Dietrich, Karl D., Columbia
Dorris, R. P., Jefferson City
Dwyer, Thomas L., Mexico
Evans, A. McChesney, Columbia
Garner, Lynn, Jefferson City
Gunn, A. J., Versailles
Gunn, Jack, Versailles
Hall, John R., Ashland
Jolley, J. Frank, Mexico
Jolly, Ben N., Mexico
Jolly, William H., Mexico
Kauffman, Ruth, Versailles
Kibbe, E. A., California
Ladenson, R. P., Columbia
Lamke, Charles M., Columbia
Lanier, Andrew S., Fulton
Latham, Kenyon, California
Loyd, Earl L., Jefferson City
Lyle, Ray, Versailles
McComas, A. R., Sturgeon
Meinershagen, C. W., Jefferson City
Neal, M. Pinson, Columbia
Schwarz, Henry, Columbia
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette
Smith, Stephen D., Columbia
Stephan, A. P., Jefferson City
Stewart, William J., Columbia
Stuart, Byron M., Boonville
Summers, Joseph S., Jr., Jefferson City
Thomas, Helen, Columbia
Thomas, Horace E., Columbia
Tinsley, John C., Jr., Columbia
Washburn, J. Loren, Versailles
Washington, Edward L., Columbia
Windmiller, M. Eugene, Columbia
Wood, George F., Fulton

Sixth Councilor District—28

Allen, Claude J., Rich Hill
Barone, Paul L., Nevada
Campbell, A. J., Sedalia
Davis, C. Braxton, Nevada
Dyer, C. P., Sedalia
Edwards, David R., Sedalia
Ellis, Coburn H., Garden City
Fulkerson, Wilbur E., Higginsville
Hansen, A. L., Butler
Haynes, Robert C., Marshall
Jones, Edward S., Harrisonville
Jones, Ralph H., Marshall
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Higginsville
Long, Frank B., Sedalia
McBurney, C. A., Slater
Martin, W. E., Odessa
Pascoe, James J., Nevada
Payne, B. T., Lexington
Roberts, P. A., Sweet Springs
Siegel, P. V., Smithton
Slickman, R. A., Appleton City
Smith, James O., Clinton
Stauffacher, C. G., Sedalia
Tracy, H. A., Belton
Ward, Joe W., Lexington
Worley, Charles A., Sweet Springs
Wray, Rolla B., Nevada

Seventh Councilor District—58

Asher, Graham, Kansas City
Bergmann, V. H. Kansas City
Berry, M. G., Kansas City
Bolin, N. Venay, Kansas City
Brown, Adrian J., Kansas City
Buckner, Robert C., Kansas City
Buhler, Victor B., Kansas City
Burcher, Robert W., Kansas City
Cheeseman, William B., Kansas City
Coffey, Ralph R., Kansas City
Duncan, Ralph E., Kansas City
Elliott, B. Landis, Kansas City
Farley, Claude C., Kansas City
Feist, George V., Kansas City
Gainey, Harold L., Kansas City
Gilkey, Harry M., Kansas City
Gillmor, C. Stewart, Kansas City
Gist, W. L., Kansas City
Greene, W. Wallace, Kansas City
Haynes, Lee, Kansas City
Hines, Paul, Kansas City
Hunt, Claude J., Kansas City
Ingham, Walton C., Kansas City
Johnson, C. Laurence, Kansas City
Johnstone, Paul, Kansas City
Keeler, James E., Kansas City
Kerr, Russell W., Kansas City
Kiene, Richard H., Kansas City
Klein, Edward H., Kansas City
Leitz, Frank B., Kansas City
Lilly, Terry E., Jr., Kansas City
Lundgren, Fred H., Kansas City
McVay, James R., Kansas City
Marks, Mark M., Kansas City
Miller, Gerald L., Kansas City
Miller, Wade H., Kansas City
Mixson, William C., Kansas City
Morrow, Raymond L., Kansas City
Murphy, Robert J., Kansas City
Nicolay, Kenneth S., Kansas City
O'Malley, James F., Kansas City
Reinhardt, G. R., Kansas City
Robinson, G. Wilse, Kansas City
Robinson, G. Wilse, Jr., Kansas City
Sandy, Charles, Kansas City
Schutz, C. B., Kansas City
Simpson, Morris B., Kansas City
Singleton, J. Milton, Kansas City
Soper, Philip, Lee's Summit
Swisher, Robert C., Kansas City
Trowbridge, E. H., Jr., Kansas City
Wakefield, F. H., Kansas City
Watson, Ethel, Independence
White, S. F., Kansas City
Williams, Joseph C., Kansas City
Williams, Vincent T., Kansas City
Wilson, Clifford C., Kansas City
Wortmann, Robert F., Kansas City

Eighth Councilor District—51

Beers, Ellsworth G., Seymour
Bickel, Vern T., Lamar
Black, Mervin H., Joplin
Brasher, Charles A., Mount Vernon
Burch, John E., Joplin
Burney, W. S., Miller
Busiek, Urban J., Springfield
Capetti, Alex P., Aurora
Coffelt, Kenneth C., Springfield
Coller, Fred, Springfield
Conrad, R. C., Springfield
DeTar, B. E., Joplin
Dietz, M. Wendell, Springfield
Elkins, Ronald F., Springfield
Ferguson, John P., Springfield
Ferguson, Robert M., Webb City
Ferrell, Thomas E., Springfield
Glenn, E. E., Springfield
Glover, Kenneth, Mount Vernon
Graves, A. J., Mount Vernon
Hall, Durward G., Springfield
H'Doubler, F. T., Springfield
Hoover, H. Lee, Springfield
Johnston, J. L., Springfield
Langston, W. Roland, Springfield
Lockhart, Charles E., Springfield
Lurie, H. H., Springfield
McIntire, Emery J., Carthage
Macdonnell, Thomas M., Marshfield
Magness, W. C., Branson
Maples, F. H., Mount Vernon
Marshall, W. J., Springfield
Morton, Paul C., Springfield
Napper, Marvin L., Springfield
Newman, Mary, Cassville
Park, W. I., Springfield
Peterson, Stanley S., Springfield
Plummer, Grover C., Buffalo
Pope, N. K., Springfield
Rainwater, E. H., Springfield
Reid, Charles T., Joplin
Roper, Stanley S., Ozark
Schwartz, E. J., Springfield
Scorse, S. W., Joplin
Sewell, Walter S., Springfield
Silsby, Don J., Springfield
Simpson, E. L., Springfield
Smith, C. Souter, Springfield
Tillman, Walter W., Springfield
Wood, George H., Carthage
Yancey, Daniel L., Springfield

Ninth Councilor District—23

Bass, B. J., Salem
Burns, T. J., Houston
Carrington, H. W., Lebanon
Cooper, C. W., Thayer
Cotton, T. W., Van Buren
Davis, H. H., Rolla
Fisher, George E., Lebanon
Frame, H. G., Mountain Grove
Hammler, Christiana V., St. James
Harrell, R. E., Lebanon
Hope, James L., Lebanon
Hurst, B. B., Lebanon
Kelly, John B., Houston
Kozal, F. L., Belle
Kramer, Scott G., St. Louis
Lytle, William R., Rolla
McDonough, Robert C., St. James
Perkins, M. B., Willow Springs
Reed, H. L., Licking
Smith, Rollin H., West Plains
Stricker, E. A., St. James
Summers, J. H., Lebanon
Wiles, Jack N., West Plains

Tenth Councilor District—36

Baldwin, Paul, Kennett
Bredall, Jerome J., Perryville
Buckthorpe, Thelma C., Sikeston
Bugg, A. F., Ellington
Bull, Ben M., Ironton
Campbell, Edward D., Cape Girardeau
Cook, O. W., Caruthersville
Cresswell, G. F., Potosi
Critchlow, W. C., Sikeston
Crowe, John T., Cape Girardeau
Dernoncourt, John E., Charleston
Elrod, D. B., Cape Girardeau
Estes, Albert M., Cape Girardeau
Foster, J. L., Desloge
Finney, W. O., Chaffee
Fuzzell, Jameso, Kennett
Hall, Frank, Cape Girardeau
Harwell, J. L., Poplar Bluff
Henrickson, W. E., Poplar Bluff
Hensley, Daniel R., Hayti
Hoctor, Emmett F., Farmington
Killion, John J., Portageville
Kinder, J. M., Cape Girardeau
Mullen, Jack, Bonne Terre
Peck, C. R., Kennett
Reeder, Charles C., New Madrid
Ridings, Harold D., Cape Giradeau
Ritter, R. A., Cape Girardeau
Roberson, John H., Lilbourn
Roebber, H. M., Bonne Terre
Sarno, Samuel M., Morehouse
Smith, Audra B., Sikeston
Tarver, Quinton, Kennett
Taylor, Van W., Bonne Terre
Trolinger, J. H., Jackson
Urban, E. D., Sikeston

Guest Speakers—19

Allen, J. Garrott, Chicago
Altemeier, W. A., Cincinnati
Colbert, James W., St. Louis
Collins, Conrad G., New Orleans
Davis, M. Edward, Chicago
Forbes, Gilbert B., Rochester, N. Y.
Helwig, Ferdinand C., Kansas City, Kansas
Herweg, John C., St. Louis
King, James P., St. Louis
Large, Alfred M., Detroit
MacQueen, John C., Iowa City
Miller, Max, Cleveland
Morris, Don P., Champaign, Ill.
Noer, Rudolf J., Louisville
Robinson, David W., Kansas City, Kansas
Schroeder, Henry A., St. Louis
Tumulty, Philip A., St. Louis
Turner, Henry H., Oklahoma City
Van Metre, Thomas E., St. Louis

Guest Physicians—31

Adrian, Joseph, Mount Vernon
Baldree, P. E., Belleville, Ill.
Bauer, John D., St. Louis
Bauer, Morris, St. Louis
Bell, W. F., Rutherford, Tenn.
Burnside, Charles, Festus
Campbell, R. M., Portsmouth, Va.
Cancelada, Juan, St. Louis
Christensen, Borge B., Mount Vernon
Dunner, Edward, St. Louis
Echols, Robert B., Kilgore, Texas
Ernst, Richard E., Clayton

Flower, Harry J., Milton, Ore.
Glaser, Robert J., St. Louis
Hepler, Opal E., Chicago
Hermann, Ewald, Highland, Ill.
Hobbs, George H., Mount Vernon
Ickovic, Ladislaw, St. Louis
Johnson, Robert D., Scott A.F.B., Ill.
Kelly, Thomas J., Woodriver, Ill.
Martiny, Per Jual, Mount Vernon
Milroy, Robert A., Valparaiso, Ind.
Mitchell, R. E., Springfield
Neuman, H. Z., St. Louis
Pinkstaff, J. T., St. Louis
Stratton, Roland P., Wenonah, N. J.
Stuckey, I. G., St. Louis
Ward, Robert L., St. Louis
Wegryn, Louis S., Elizabeth, N. J.
Wiswell, D. O., St. Louis
Yuromi, J., St. Louis

There were registered 17 interns and residents, 165 medical technologists, 70 physical therapists, 192 exhibitors and 113 guests. Total registration was 1,193.

Book Reviews

Endocrine Treatment in General Practice. Edited by Max A. Goldzieher, M.D., and Joseph W. Goldzieher, M.D. Springer Publishing Company, Inc., New York, 1953. Price $8.00.

This is a compilation of chapters by twenty-one different authors, edited by the Goldziehers. It was planned to be a book on the application of endocrine products to therapy of both endocrine and nonendocrine diseases. Actually, it is also a manual of symptoms diagnosis. Thus, under the section heading "Constipation," are listed those endocrine diseases supposedly causing constipation. Sections such as chronic bronchitis, ulcerative colitis and acute leukemias are included because of the response of these conditions to ACTH and cortisone. The chapters, supposedly arranged by systems, include the following: gastrointestinal, cardiovascular. virilism, menstrual disorders, pregnancy, menopause, hypogonadism.

To take a typical disease, for example, myxedema, it is found discussed throughout the book under various symptoms covered by this disease. The longest discussion of myxedema, however, occurs under diseases of the nervous system, probably because of the marked mental character of the clinical picture. Therapy of myxedema is discussed wherever myxedema is mentioned and there is often disagreement between the chapters as to optimum therapy. The treatment of related symptoms is also included, such as iron for anemia, antibiotics and so on.

Perhaps, as the editors state, the book takes the place of a consultant at the bedside, but the structure of the book is such as to discourage any reference to it. H. S.

Holt Pediatrics, by L. Emmett Holt, Jr., Professor of Pediatrics, New York University College of Medicine; Director, Children's Medical Service, Bellevue Hospital, New York City; and Rustin McIntosh, Carpentier Professor of Pediatrics, Columbia University, and Director of the Pediatric Service in the Babies Hospital, New York City. Twelfth Edition. Appleton-Century-Crofts, Inc. New York.

Thirteen years have elapsed since the eleventh edition of Holt's "Diseases of Infancy and Childhood." Now comes the twelfth edition in a somewhat new arrangement, with improvement in type for paging, subject headings and paragraphs making the book more readable.

A new edition of this great work was long overdue considering the progress that has been made in the field of pediatrics. Much of the material in this edition is new, such as hormonal therapy, antibiotics, pediatric cardiology, body fluid chemistry, histoplasmosis, coccidioidomycoses and coxsackie infections.

The discussion of the common cold, the anemias of childhood, poliomyelitis, herpes simplex infections to mention some of the more mundane matters are up-to-date and excellent reading.

The name of the book has been changed to Holt Pediatrics. Rustin McIntosh and L. Emmett Holt, Jr., son of the original author, deserve a great deal of credit for the selection and arrangement of material. In this work there were seventy-two contributing authors, well-known names in the pediatric literature and each eminently qualified for the task assigned. As the authors state, "the field of pediatrics has long since grown beyond the scope of single authority" and in a work of this kind one wonders how conflicting viewpoints, subject emphasis, length of presentation and other factors could be synthesized to make up such an admirable book.

The section on diabetes with instructions for parents of diabetic children in the appendix is a noteworthy feature. Rheumatic fever is discussed in a new chapter on "Collagen Diseases." Primary atypical pneumonia, epidemic pneumonitis of infants and erythroblastosis are developments within the past decade and the advances in ductless gland disturbances are adequately treated in this edition.

An appendix giving growth tables, body measurement, the recognition and treatment of accidental poisoning, osseous development and normal values in blood chemistry is invaluable for quick reference.

This book is indispensible for pediatricians and general practitioners and a valuable addition to every physician's library. H. L. D.

Some Contemporary Thinking About the Exceptional Child, Proceedings of a Special Conference held prior to the Midcentury White House Conference on Children and Youth on Some Contemporary Thinking About the Exceptional Child Under the Auspices of the Child Research Clinic of the Woods Schools in Collaboration with the Department of Health, Public Instruction, and Welfare of the Commonwealth of Pennsylvania at The Education Building Forum, Harrisburg, Pennsylvania, November, 1949.

This little booklet of some sixty-one pages is a gathering together of a few addresses by the Governor, educators and doctors interested in Child Welfare work in the State of Pennsylvania. One contribution bears on the legal side of foundations for the care of defectives and furnishes the information on expense for caring for a defective child in Pennsylvania. This also considers varied legal problems with trusts and annuities and the complications of federal income taxes.

Another report goes into considerable detail about the treatment of retarded children and the possibility of newer preparations proving effective. Of course some of this is speculation. For instance they consider penicillin in the treatment of congenital syphilis. Also benzedrine sulphate is discussed, but still a problem up for trial.

Dr. Leslie D. Hohman writes seriously about some of the pitfalls in diagnosis and treatment of these retarded children.

The pamphlet would be of interest to any one who has to deal with private or government institutions caring for crippled or handicapped children, whether physical or mental or both. A. L. S.

Annual Banquet

1. Members receiving 50 year pins group around table of other men receiving pins. 2. and 3. Members receiving 50 years pins were grouped at adjoining tables at the annual banquet. 4. Guy N. Magness, M.D., President, shows the pin to several St. Louis physicians who were to receive the pin at the banquet. 5. The Very Reverend Paul C. Reinert, S.J., President, St. Louis University, was speaker at the banquet. 6. H. E. Petersen, M.D., St. Joseph, incoming President, presents the Past President's Key to Guy N. Magness, M.D., University City, retiring President. 7. Dr. Magness presented the President's address.

Towns and County

A

Adrian, Bates County
Affton, St. Louis County*
Albany, Gentry County
Altenburg, Perry County
Anderson, McDonald County
Appleton City, St. Clair County
Arnold, Jefferson County
Ash Grove, Greene County
Ashland, Boone County
Aurora, Lawrence County
Ava, Douglas County

B

Bakersfield, Ozark County
Ballwin, St. Louis County*
Barnard, Nodaway County
Barnhart, Jefferson County
Beaufort, Franklin County
Belle, Maries County
Belton, Cass County
Bethany, Harrison County
Birch Tree, Shannon County
Bismarck, St. Francois County
Bloomfield, Stoddard County
Blue Springs, Jackson County
Bolckow, Andrew County
Bolivar, Polk County
Bonne Terre, St. Francois County
Boonville, Cooper County
Bourbon, Crawford County
Bowling Green, Pike County
Branson, Taney County
Brashear, Adair County
Braymer, Caldwell County
Breckenridge, Caldwell County
Brentwood, St. Louis County*
Bridgeton, St. Louis County*
Brookfield, Linn County
Brookline Station, Greene County
Browning, Linn County
Brunswick, Chariton County
Bucklin, Linn County
Buffalo, Dallas County
Burlington Junction, Nodaway County
Butler, Bates County
Bynumville, Chariton County

C

Cabool, Texas County
California, Moniteau County
Camdenton, Camden County
Cameron, Clinton County
Campbell, Dunklin County
Camp Crowder (See St. Louis County)
Canton, Lewis County
Cape Girardeau, Cape Girardeau County
Cardwell, Dunklin County
Carl Junction, Jasper County
Carrollton, Carroll County
Carthage, Jasper County
Caruthersville, Pemiscot County
Cassville, Barry County
Cedar Hill, Jefferson County
Centerville, Reynolds County
Centralia, Boone County
Chaffee, Scott County
Charleston, Mississippi County
Chesterfield, St. Louis County*
Chillicothe, Livingston County
Clarksville, Pike County
Clayton, St. Louis County*
Clinton, Henry County
Coatsville, Schuyler County
Cole Camp, Benton County
Columbia, Boone County
Conception Junction, Nodaway County
Concordia, Lafayette County
Conway, Laclede County
Cooter, Pemiscot County
Crane, Stone County
Creve Coeur, St. Louis County*
Crocker, Pulaski County
Crystal City, Jefferson County
Cuba, Crawford County

D

Dearborn, Platte County
Delta, Cape Girardeau County
Desloge, St. Francois County
DeSoto, Jefferson County
Dexter, Stoddard County
Diamond, Newton County
Dixon, Pulaski County
Doniphan, Ripley County
Downing, Schuyler County
Drexel, Cass County

E

East Prairie, Mississippi County
Edgerton, Platte County
Edina, Knox County
Eldon, Miller County
El Dorado Springs, Cedar County
Ellington, Reynolds County
Elsberry, Lincoln County
Essex, Stoddard County
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Excello, Macon County
Excelsior Springs, Clay County

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Flat River, St. Francois County
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Fredericktown, Madison County
Fulton, Callaway County

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Greenfield, Dade County
Green Ridge, Pettis County

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Carney, Joseph E., Jr., St. Louis
Carpenter, George T., St. Joseph
Carpenter, George W., Chillicothe
Carpenter, Wallace, Rockport
Carr, A. D., St. Louis
Carrier, Edson C., Kansas City
Carrier, John A., Affton
Carrington, Howard W., Lebanon
Carroll, George A., St. Louis
Carroll, Grayson, St. Louis
Carroll, Percy J., St. Louis
Carron, Oscar A., Perryville
Carter, Howard, Browning
Carter, James R., Neosho
Carter, William W., St. Louis
Casebolt, Buford T., Kansas City
Casebolt, Milton B., Kansas City
Casey, Shederic A., Lebanon
Casford, Ralph S., Kansas City
Cason, Elbert H., St. Louis
Cassel, Melvin A., St. Louis
Cassidy, Leslie D., St. Louis
Castelaw, Rush English, Kansas City
Castles, Charles C., Lemon Grove, Calif.
(Member Pemiscot County)
Castles, John E., Kansas City
Catanzaro, Anthony F., St. Louis
Cavaness, Ernest W., Leucadia, Calif.
(Member Jackson County)
Cavender, Savino W., Address Unknown
(Member St. Louis Medical Society)
Centner, Paul Joseph, Kansas City
Chalkley, Judson I., Columbia
Chamberlain, Gilbert L., New Franklin
(Member Cooper County)
Chambers, James Q., Kansas City
Chamness, James T., St. Louis
Chandler, Orville B., New Madrid
Chapman, Arthur H., Kansas City
Chapman, J. R., Steele
Chapman, Samuel B., Kansas City
Charles, Benjamin H., St. Louis
Charles, Cecil M., Clayton
Charnas, Raymond M., St. Louis
Chastain, Maurice W., N. Kansas City
Chatman, Eugene P., Kansas City
Cheeseman, Wm. B., Kansas City
Chernoff, Amoz I., St. Louis
Cherre, Charles J., Norfolk, Va.
(Member St. Louis Medical Society)
Chiarottino, Joseph F., St. Joseph
Chiasson, E. Challle, Columbia
Chieffi, Margaret, St. Louis
Chilton, James C., Hannibal
Chinburg, Kenneth, Springfield
Chute, W. Deward, Moberly
Ciapciak, Stanley J., St. Louis
Claiborn, Edward G., Camdenton
Clancy, James F., St. Louis
Clapsaddle, Clare J., Ste. Genevieve
Claridge, Ralph A., St. Louis
Clark, Chester Lee, Trenton
Clark, Harold B., Kansas City
Clark, Irving H., Hickman Mills
Clark, James Frederick, St. Louis
Clark, Kendall A., Jefferson City
Clarke, Michael J., Springfield
Clasen, Arthur C., Kansas City
Clawson, James W., St. Louis
Clay, Calvin, St. Charles
Clay, Hampson S., Poplar Bluff
Clayton, Edgar L., Springfield
Cleary, Frank, St. Louis
Cleveland Horace F., Long Beach, Calif.
(Member St. Louis Medical Society)
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Cline, Jesse A., Oran
Clithero, W. H., St. Louis
Coates, Charles Clinton, Joplin
Coates, Thomas A., St. Louis
Coburn, Donald F., Kansas City
Cochran, Jo R., Cape Girardeau
Cochrane, Joseph J., Kansas City
Cockerell, Sanford F., Independence

Cofer, James Clinton, Kennett
Coffelt, Kenneth C., Springfield
Coffey, James L., Fairfax
Coffey, Ralph R., Kansas City
Coffin, Ernest L., Portage, Maine
(Member St. Louis Medical Society)
Coffin, Theodore A., Kansas City
Coffman, Esther E. L., St. Louis
(Member Ozarks Counties)
Cohen, Benjamin H., St. Louis
Cohen, Frank, St. Louis
Cohen, Harry K., Kansas City
Cohen, Hilliard, Kansas City
Cohen, Louis, St. Louis
Cohle, Richard R., St. Louis
Cohnberg, Rosellen E., Monett
Cohrs, Clarence C., Moberly
Coil, Paul E., Mexico
Coldwater, Kenneth B., St. Louis
Coleman, William G., St. Louis
Colgate, Cleon Edward, Amarillo, Texas
(Member St. Louis County)
Colglazier, Mary C., Kansas City
Coller, Frederick C., Springfield
Collier, Alfred, Chillicothe
Collins, John M., Affton
Collodi, George A., St. Louis
Comboy, Lawrence J., Independence
Comens, Ruth C., St. Louis
Commerford, James J., Crystal City
Compton, James R., Kirkwood
Cone, Alfred J., Chesterfield
Conley, Dudley S., Columbia
Connell, Evan S., Kansas City
Connor, John J., St. Louis
Connor, Samuel W., Mountain Grove
Conover, Charles C., Kansas City
Conrad, Adolph H., St. Louis
Conrad, Adolph H., Jr., St. Louis
Conrad, Joseph A., Chillicothe
Conrad, Marshall B., St. Louis
Conrad, Raymond C., Springfield
Conrad, Robert W., St. Joseph
Cook, James T., St. Louis
Cook, Jerome E., St. Louis
Cook, Norman L., Cape Girardeau
Cook, O. W., Caruthersville
Cook, Ralph L., University City
Cooke, Francis W., Caruthersville
Cooke, Jean V., St. Louis
Cooper, Claude W., Thayer
Cooper, Henry T., St. Louis
Cooper, John H., Kansas City
Cooper, John M., Butler
Cooper, Lawrence E., Fort Myers, Fla.
(Member Pemiscot County)
Cooper, Maurice Edmund, Columbia
Cooper, R. Lee, Warrensburg
Cope, James C., Columbia
Cope, Joseph S., Lexington
Copher, Glover H., St. Louis
Cordonnier, Justin, St. Louis
Cornell, John C., St. Louis
Correnti, Nicholas A., St. Louis
Cortner, Mary C., Kansas City
Cory, Harriet S., St. Louis
Cossins, Carlos E., St. Joseph
(Member Nodaway-Atchison-Gentry-Worth County)
Costa, Dominic V., St. Louis
Costello, Cyril J., St. Louis
Costello, Joseph P., St. Louis
Costello, Joseph P., Jr., St. Louis
Costen, James B., St. Louis
Costrino, John J., St. Louis
Costrino, Joseph A., St. Louis
Cotton, Tolman W., Van Buren
Cottrell, Wilson P., Reeds Spring
Coughlin, Bertrand D., St. Louis
Coulter, Robert L., Waterloo, N. Y.
(Member St. Louis County)
Counsell, Chester M., Kansas City
Cowan, R. D., Aurora
Cowherd, Joseph B., Kansas City
Cox, Kenneth E., Kansas City
Cox, William A., Jefferson City
Craig, Arthur D., Springfield
Craig, Irwin T., Joplin
Craig, Owen W. D., St. Joseph
Craig, W. E., Address Unknown
(Member Jasper County)
Cramb, Arthur B., Spofford, N. H.
(Member North Central Counties)
Cramer, Quentin, Kansas City
Crawford, Archie L., Joplin
Crawford, Katherine J., St. Louis
Crawford, Oral B., Springfield
Crawford, Robert M., Sullivan
Creane, John C., St. Louis
Creech, Joseph C., Troy
Creekmore, M. A., Greenville, Miss.
(Member St. Louis County)
Crego, Clarence H., Jr., St. Louis
Cremer, William J., Fulton
Cresswell, George F., Potosi
Crews, Robert N., Fulton
Crider, Russell J., St. Charles
Crispell, Lawrence S., Joplin
Critchlow, William C., Sikeston
Crites, Edward, Sedgewickville
Crosby, Alice Stryker, Salem
Crossen, Robert J., St. Louis
Crossman, Robert W., Webster Groves
Crouch, F. Richard, Farmington
Crowe, John T., Cape Girardeau
Crowell, Hugh C., St. Louis
Culbertson, William F., Hickman Mills
Cullers, Charles H., Trenton
Cummings, James H., St. Louis
Cummins, Walter F., Kansas City
Cunningham, Darral D., Springfield
Cunningham, Eric A., Louisiana
Curl, Howard, Joplin
Curran, Edward J., Kansas City
Curran, Kevin E., Kansas City
Curran, Maurice D., Kansas City
Cutcliff, Daniel J., Kansas City
Cutler, Harold M., St. Louis
Cutler, Harry, St. Louis
Cutts, F. William, Poplar Bluff
Czebrinski, Edward W., St. Louis

D

Daake, John W., St. Louis
Dahms, Gustave, St. Louis
Daley, Frank R., Hamilton
Dalton, Arthur R., St. Louis
Daman, George A., St. Louis
Dames, Richard J., St. Louis
Damron, E. O., Elsberry
Damron, Oscar H., Warrensburg
Danis, Peter G., St. Louis
Dankner, Arnold, St. Louis
Dann, David S., Kansas City
Darnell, Thomas F. B., Columbia
Daughaday, William H., St. Louis
Davault, George K., Richmond
Davault, Webster W., Delta
Davidson, Morris, Clayton
Davie, Joseph, St. Louis
Davies, Dean F., St. Louis
Davis, C. B., Nevada
Davis, Edgar W., St. Louis
Davis, Frank L., St. Louis
Davis, Harry H., Rolla
Davis, Herbert V., Kansas City
Davis, Irl R., St. Louis
Davis, Jack M., Raytown
Davis, John J., Kansas City
Davis, Kenneth A., Kansas City
Davis, Landis Y., Canton
Davis, Martin W., Webster Groves
Davis, Myron W., St. Louis
Davis, Paul Albert, Willow Springs
Davis, Paul C., Neosho
Davis, Robert C., Kansas City
Davis, Robert I., Birch Tree
Davis, Thomas M., St. Louis
Davis, Wilbur L., Charleston
Dawson, Orville L., St. Joseph
Day, Anthony B., St. Louis
Day, Cameron B., St. Louis
Day, Maxwell, Rapid City, S. Dak.
(Member Buchanan County)
Deakin, Rogers, St. Louis
Dean, Francis D., Fayette
Dean, Lee Wallace, Jr., Clayton
Dean, Leslie E., Maryville
DeHovitz, Bernard, University City
de la Torre, John J., Sullivan
Delzell, William A., Springfield
DeMaria, Peter F., Kansas City
Demko, Frank, St. Louis
Demko, William, St. Louis
DeMott, Jack D., Kansas City
DeMotte, John Allan, Kansas City
Dempsey, D. T., Kennett
Denney, Richard W., Mountain Grove
Dennie, Charles C., Kansas City
Denny, H. M., Union
Denny, Robert B., University City
Denton, Levi D., Hayti
DePew, Heber B., St. Louis
Deppe, Arthur H., St. Louis
Dernoncourt, John E., Charleston
DeTar, Burleigh E., Joplin
DeTar, B. E., Jr., Joplin
Deutch, Max, St. Louis
Devine, John B., St. Louis
Deweese, Everett R., Kansas City
DeWitt, Robert H., Washington, D. C.
(Member St. Louis Medical Society)
Dickson, Frank D., Kansas City
Dieckman, William C., Dexter
Diehr, Alvin H., St. Louis
Diehr, Maurice A., St. Louis
Diekroeger, M. L., Boonville
Dietrich, Karl D., Columbia
Dietz, M. Wendell, Springfield
DiLeo, Senatro W., St. Louis
Dill, Foster A., Maplewood
Dillard, Erin M., Springfield
Dills, Joseph N., Springfield
Dimond, Edgar A., Springfield
Dinelli, Frank E., Poplar Bluff
Diveley, Rex. L., Kansas City
Dixon, John Rex, Brookfield
Dixon, Otto J., Kansas City
Dixon, Vewiser L., Kansas City
Dlabal, Luke J., Independence
Dmytryk, Eugene T., St. Louis
Doan, Deborah, Bakersfield
Doane, William L., Grandview
Dobbins, Thomas, La Porte, Ind.
(Member Jefferson County)
Dodge, Mark, Kansas City
Dodge, Milton, Kansas City
Dodson, William W., Kansas City
Doisey, Robert A., Kirkwood
Domke, Herbert R., Clayton
Donahoe, James L., St. Louis
Donley, Leo F., Jr., Ferguson
Donley, Robert R., Monett
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Dorris, Richard P., Jefferson City
Dorsch, Ervin H., Independence
Dorsett, E. Lee, University City
Doubek, John C., St. Louis
Doubek, John Charles, Jr., Kirkwood
Douglas, John W., Joplin
Douglas, Thomas H., Jr., Camarillo, Calif.
(Member Henry County)
Douglass, Jesse E., Webb City
Dowd, James F., Jr., St. Louis
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Downey, James W., Kansas City
Doyle, Charles R., St. Louis
Doyle, Joseph P., Address Unknown
(Member Saline County)
Drace, Charles C., St. Louis
Drace, Charles C., Jr., St. Louis
Drace, James J., Cape Girardeau
Drake, Avery A., Rolla
Drake, Roy F., Kansas City
Drake, Truman G., St. Louis
Drake, William L., Jr., St. Louis
Draney, Thomas E., Kansas City
Draney, Thomas L., Kansas City
Drescher, Emmett R., St. Louis
Drews, Leslie C., St. Louis
Drey, Norman W., St. Louis
Dreyer, Carl J., Webster Groves
Dreyer, Philip V., Huntsville
Dripps, Roy C., St. Louis
Drisko, Robert M., Kansas City
Drowns, Bruce V., Kansas City
Drum, Clarence G., St. Louis
Drum, Helen M. Aff, Clayton
Duckett, Claude E., Lamar
Duden, Charles W., St. Louis
Duemler, John H., St. Louis
Duemler, Thomas B., Seneca
Duer, Mildred C., Kansas City
Duffy, Edgar A., Trenton
Duffy, Oliver F., Trenton
Duggan, John J., Jr., St. Louis
Dulick, Michael, Brentwood
DuMont, Clement C., St. Joseph
Dunaway, Howard A., Sikeston
Duncan, Ralph E., Kansas City
Duncan, Robert D., Springfield
Duncan, William H., Kansas City
Dunham, R. H., N. Kansas City
Dunmire, George Q., Kennett
Dunshee, Robert E., Maryville
Durham, Silas L., Dearborn
Durst, Henry, Fulton
Dworkin, Saul, St. Louis
Dwyer, Frank X., Kansas City
Dwyer, Hugh L., Kansas City
Dwyer, Reinhardt D., N. Kansas City
Dwyer, Thomas L., Mexico
Dye, Harold B., Kansas City
Dyer, Dallas J., St. Louis
Dyer, David P., Sedalia

E

Eades, Dee W., St. Louis
Eagleton, Mark D., St. Louis
Earp, Ralph K., St. Louis
Eber, Carl T., St. Louis
Eberle, John P., Randolph A.F.B., Texas
(Member St. Louis Medical Society)
Eberle, Vincent L., St. Louis
Echterhoff, Harry R., St. Louis
Eck, Birkle, St. Louis
Eck, Peter A., St. Louis
Ecker, Decider, Pacific
Eckert, Charles L., St. Louis
Eckert, Clarence T., St. Louis

Ecklund, Archibald M., San Diego, Calif.
(Member St. Louis Medical Society)
Ector, Henry J., Mexico
Edde, Clifford G., Kansas City
Edele, Eugene H., St. Louis
Edelman, Mina K., St. Louis
Edgerton, Winfield D., Address Unknown
(Member St. Lous Medical Society)
Edmonds, Devilla D., Kansas City
Edmondson, Charles T., Malden
Edmondson, Paul James, Ladue
Edwards, D. R., Sedalia
Edwards, Francis L., Monett
Edwards, Joseph C., St. Louis
Edwards, T. Burton, Cedar Hill
Edwards, Theodore F., N. Kansas City
Edwards, Waldo B., Cedar Hill
Efron, Joseph, St. Louis
Eggleston, D. E., Macon
Egley, Loren Edward, Kirkwood
Eidelman, Jack R., St. Louis
Eidmann, Walter P., St. Louis
Eigel, Edwin G., St. Louis
Eimer, Charles E., St. Louis
Eisele, William M., Address Unknown
(Member St. Louis Medical Society)
Eisenmann, Benjamin P., New Haven
Eisenstein, Albert B., St. Louis
Eklund, Alfred W., Pleasant Hill
Elam, James O., Buffalo, N. Y.
(Member St. Louis Medical Society)
Elders, Frank A., Jr., Cuba
Eldridge, Charles J., Kansas City
Elias, David J., Kansas City
Eliscu, Fred, St. Joseph
Eliscu, Juliette, Joplin
Elkins, Ronald F., Springfield
Eller, Byron H., Bangkok, Thailand
(Member Ozarks Medical Society)
Ellersieck, Dorothy M., St. Louis
Ellery, William L., LaGrange
Ellett, William H., Appleton City
Elliott, B. Landis, Kansas City
Elliott, Gladden V., St. Louis
Elliott, James R., Kansas City
Elliott, John R., St. Joseph
Elliott, Raymond G., Coronado, Calif.
(Member Jackson County)
Ellis, Burnett E., Gideon
Ellis, Calvin C., St. Louis
Ellis, Colburn H., Garden City
Ellis, Francis J., Springfield
Ellis, Sam T., Hannibal
Ellis, William W., Marceline
Ellison, Leroy E., Maplewood
Elman, Robert, St. Louis
Elrod, Dennis B., Cape Girardeau
Elson, Julius, Ladue
Elston, George B., Kansas City
Emerson, Reynolds L., Brentwood
Emmert, Fred, St. Louis
Engel, Lawrence P., Kansas City
Engelhardt, Robert C., Poplar Bluff
Engleman, Reinhold, St. Louis
English, Milton T., Kirksville
English, Wallace D., Cardwell
Engman, Martin F., St. Louis
Enloe, Lawrence D., Jefferson City
Epp, George J., St. Louis
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Epps, Curtis, Springfield
Erlanger, Herman, St. Louis
Erlanger, Joseph, St. Louis
Erni, Harry E., Macon
Ernst, Edwin C., St. Louis
Ernst, Edwin C., Jr., St. Louis
Ernst, Roland P., St. Louis
Esch, John Gerald, Republic
Eskeles, Irwin H., St. Louis
Esker, George, St. Louis
Esslinger, Arthur T., St. Louis
Estes, Albert M., Cape Girardeau
Etheredge, Maude Lee, Palo Alto, Calif
(Member Boone County)
Eto, Jackson, St. Louis
Etzenhouser, Russel D., Independence
Eubank, Dillard M., Raytown
Eubank, William R., Kansas City
Evans, Albert L., Bonne Terre
Evans, E. J. E., St. Louis
(Member Jackson County)
Evans, Ezra L., Springfield
Evans, Ezra L., Jr., Springfield
Evans, Fred L., Chico, Calif.
(Member St. Louis Medical Society)
Evans, Harry Troy, Branson
Evans, John C., Kirkwood
Everist, Guy V., San Diego, Calif.
(Member Phelps-Crawford-Dent-Pulaski Counties)
Eversoll, Norton J., St. Louis
Ewert, J. O., Sedalia
Exon, C. Stuart, Jefferson City
Eyermann, Charles H., St. Louis
Eyermann, H. W., Warrenton

F

Fair, William L., Chillicothe
Falk, O. P. J., St. Louis
Fallet, Charles E., DeSoto
Farley, Claude C., Kansas City
Farley, William M., St. Louis
Farney, Jacob P., Kansas City
Farnsworth, Jesse J., Kansas City
Farrar, C. B., Flat River
Farrar, John T., West Newton, Mass.
(Member St. Louis Medical Society)
Farrell, Robert J., St. Louis
Farris, H. G., St. Louis
Farris, William W., St. Louis
Farthing, Fred R., Springfield
Farthing, Gene W., Springfield
Feierabend, Frank L., Kansas City
Feind, Earl E., Rolla
Feinstein, Leon A., St. Louis
Feist, George V., Kansas City
Feldman, David, San Francisco, Calif.
(Member St. Louis Medical Society)
Feller, C. E., Springfield
Feller, Harold H., St. Louis
Fellhauer, Carl M., St. Louis
Fellows, William W., Albany, N. Y.
(Member Chariton-Macon-Monroe-Randolph Counties)
Feltz, L. W., Perryville
Ferguson, Donald S., Kansas City
Ferguson, Eugene H., Kansas City
Ferguson, James T., Kansas City
Ferguson, John P., Jr., Springfield
Ferguson, L. H., Monett
Ferguson, L. H., Jr., Alexandria, La.
(Member Ozarks Counties)
Ferguson, Luther J., St. Joseph
Ferguson, Ralph L., Joplin
Ferguson, Robert M., Webb City
Ferguson, Wilson J., Sikeston
Ferrara, John P., St. Louis
Ferrell, Thomas E., Springfield
Ferris, Carl R., Kansas City
Fessenden, Ersel M., Springfield
Field, Charles A., Cole Camp
Findley, James W., Kansas City
Fineberg, Maxwell, St. Louis
Fingerhood, Marvin G., Address Unknown
(Member St. Louis Medical Society)
Fingert, H. H., St. Louis
Finkel, Barney W., St. Louis
Finley, Freeman L., Overland
Finnegan, Frank R., St. Louis
Finnegan, Joseph V., St. Louis
Finney, William O., Chaffee
Fischer, Edward H., N. Kansas City
Fischer, Erich, St. Louis
Fischer, Harry W., St. Louis
Fischer, Theodore, Altenburg
Fish, Virgil O., St. Louis
Fisher, Arthur O., St. Louis
Fisher, George E., Lebanon
Fisher, Joseph L., St. Joseph
Fitch, C. H. Max, Springfield
FitzGerald, Leo P., University City
Fitzgerald, Robert H., Independence
Flader, Otto F., St. Louis
Flance, Israel J., St. Louis
Flanders, Horace F., Kansas City
Flatley, John A., Raytown
Flavan, David B., St. Louis
Fleishman, Alfred, St. Louis
Fleming, Jacob W., Moberly
Fleming, Royall B., Kansas City
Fleming, Thomas S., Moberly
Fletcher, Paul F., St. Louis
Fletes, James W., Normandy
Flotte, Bernard H., St. Louis
Flynn, Edward P., St. Louis
Flynn, John T., St. Louis
Flynn, Joseph E., St. Louis
Focht, Ralph H., Strafford
Folck, William P., Kansas City
Forbes, Kenneth A., San Francisco, Calif.
(Member St. Louis Medical Society)
Ford, Lee T., Jr., St. Louis
Ford, Walter W., Gordonville
Forgrave, John R., St. Joseph
Forgrave, Leon Paul, St. Joseph
Forman, George W., St. Joseph
Forman, Louis H., Kansas City
Forsen, James A., St. Louis
Forsman, Waldo W., Jr., Sappington
Forster, A. F., Seattle, Wash.
(Member St. Louis Medical Society)
Forster, Armand C., St. Louis
Forsythe, Robert W., Kansas City
Forti, John J., St. Louis
Foster, Howard M., St. Louis
Foster, Jack Lee, Desloge
Foster, Leon, St. Louis
Foster, Robert L., St. Louis
Fowler, I. Charles, N. Kansas City
Fowler, J. Henry, Fulton
Fowler, James W., Kansas City
Fox, Charles R., Kansas City
Fox, Leon J., St. Louis
Fox, Robert E., St. Louis
Frame, Homer G., Mountain Grove
Francis, William C., Springfield
Francka, W. F., Hannibal
Frank, Adolph M., St. Louis
Frankel, Sol I., St. Louis
Frankl, George, Kansas City
Franklin, Harold A., St. Louis
Franklin, Max S., St. Louis
Frazier, Donald B., St. Louis
Fredeen, Robert C., Kansas City
Freedman, Harold, St. Louis
Freedman, Ruth S., St. Louis
Freeman, David M., St. Louis
Freeman, Hal Elson, Springfield
Freeman, Spencer L., Kirksville
Freiheit, Harold J., St. Louis
Freimuth, L. E., St. Louis
Frerking, Herbert W., St. Louis
Freund, Newton M., St. Louis
Freund, Samuel J., St. Louis
Frick, John Paul, Kansas City
Friedman, Bernard, Koch
Friedman, Morris L., Kansas City
Fries, Armand D., St. Louis
Fries, John W., Bethesda, Md.
(Member St. Louis Medical Society)
Fries, William A., St. Louis
Friskel, Arthur K., St. Louis
Fritsch, Kilian F., East St. Louis, Ill.
(Member St. Louis Medical Society)
Fritschel, Godfrey C., St. Louis
Froelich, Edwin J., St. Louis
Froelich, Rae W., Lebanon
Fryer, Minot P., St. Louis
Fuchs, George J., Overland
Fuerth, A. L., Cape Girardeau
Fuhrman, Donald Lee, Kansas City
Fulbright, James H., Springfield
Fulkerson, Wilbur E., Higginsville
Fulks, Richard B., California
Funsch, Edwin C., St. Louis
Funsch, Robert E., University City
Furla, Gus J., Brentwood
Furlow, Leonard T., St. Louis
Fuson, Levi H., St. Joseph
Fuson, William A., Trenton
Fuzzell, Jameso, Kennett

G

Gaebe, Harold C., Desloge
Gafney, George T., Clayton
Gaines, John F., Oklahoma City, Okla.
(Member St. Louis Medical Society)
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Gainey, Harold L., Kansas City
Gale, Frank W., Bismarck
Gale, Joseph F., Chillicothe
Gale, Philip R., St. Louis
Galeno, William A., San Francisco, Calif.
(Member St. Louis Medical Society)
Gallagher, John F., St. Louis
Gallagher, Lionel M., California
Gallagher, Wm. J., St. Louis
Ganley, William C., Kansas City
Gansloser, Maximilian W., St. Louis
Gansloser, Wilbert M., Clayton
Gantt, Ernest S., Jr., Mexico
Garcia, Charles L., Mexico
Gard, Raymond F., Independence
Gardner, Joseph W., Glasgow
Garner, Lynn M., Jefferson City
Garrett, Glen H., Columbia
Garrison, Roy F., Kansas City
Gaskins, John Hayden, Kansas City
Gaston, Ralph E., Richmond Heights
Gaunt, Frank P., Webster Groves
Gay, Elmer E., Richmond
Gay, George, Ironton
Gay, Lee Pettit, St. Louis
Gearhart, M., Bethany
Gebert, Clara M., Valley Park
Gempel, Paul A., Kansas City
Gentry, Enoch N., Kansas City
Gentry, Marvin C., Ava
Gentry, Merritt L., Springfield
Geraughty, Edward, Kansas City
Gernstetter, Sangwill L., Poplar Bluff
Gerst, Aloysius C., St. Louis
Gerwig, H. Eugene, Downing
Gerwitz, Bernard W., St. Louis
Gestring, Hugh A., Kansas City
Getelson, Joseph, Kansas City
Gibson, David M., Kansas City
Gibson, Helen F., St. Louis
Gibstine, Marvin H., St. Louis
Giem, Ross Nye, Rolla
Gildea, Edwin F., St. Louis

Gildea, Margaret C. L., St. Louis
Gilkey, Harry M., Kansas City
Gillespie, Wm. J., Richmond Heights
Gillham, Frank W., Jefferson City
Gilliland, Oliver S., Kansas City
Gillmor, Charles S., Kansas City
Ginsberg, A. Morris, Kansas City
Ginsberg, Norman A., Kansas City
Gish, Rutledge, Fulton
Gissy, Charles J., St. Louis
Gist, Wm. L., Kansas City
Gist, William W., Kansas City
Gitt, Joseph J., Richmond Heights
Glasco, Loren A., Urbana
Glaser, Martin J., St. Louis
Glaser, Robert J., St. Louis
Glassberg, Bertrand Y., St. Louis
Glasscock, Ernest L., Kansas City
Glenn, David H., Warsaw
Glenn, Elmer E., Springfield
Glenn, Joseph E., St. Louis
Glennon, William P., St. Louis
Glick, Harry N., St. Louis
Glotfelty, Henry Wayne, Piqua, Ohio
(Member Callaway County)
Glover, Kenneth, Mount Vernon
Glynn, Robert, Springfield
Gnade, Albert J., St. Louis
Goebel, Joan M., Clayton
Goldberg, Isadore E., Braymer
Goldenberg, David, St. Louis
Goldenson, Max J., St. Louis
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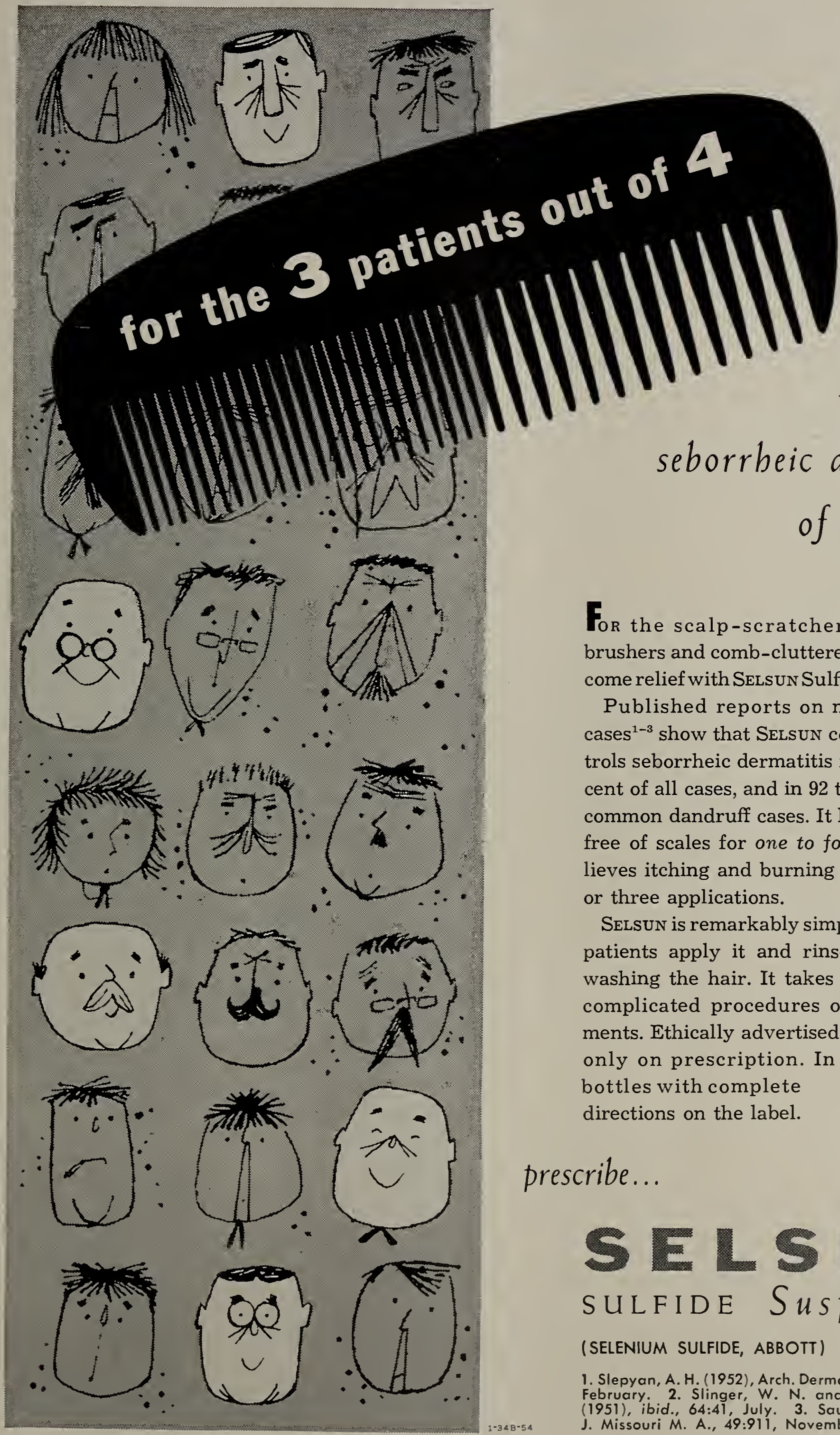
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1-348-54

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Koutsoumpas, William V., St. Louis
Kovitz, Louis, Mission, Kansas
(Member Jackson County)
Kowert, Edward H., St. Louis
Kozal, Francis L., Belle
Kraft, Edward O., Brentwood
Kraft, Jacob, Kansas City
Kramer, Fred, St. Louis
Kramer, Scott G., St. Louis
(Member South Central Counties)
Kramolowsky, Helmuth H., St. Louis
Kranson, Seymour J., Independence
Krause, G. Lynn, St. Louis
Krebs, Joseph M., St. Louis
Krebs, Otto S., St. Louis
Krieger, John L., St. Louis
Kromer, Charles, St. Louis
Kubitschek, Paul F., St. Louis
Kuebrich, Thomas C., Ferguson
Kuhn, John R., Jr., Joplin
Kulowski, Jacob, St. Joseph
Kuritz, Albert B., Little Rock, Ark.
(Member St. Louis County)
Kurth, Robert K., St. Louis
Kurtzeborn, Edwin E., Tampa, Fla.
(Member St. Louis Medical Society)
Kurz, Rudolph F., St. Louis
Kuttner, Marianne, St. Louis
Kyger, Fred B., Kansas City
Kyner, Thomas A., Kansas City

L

Lachance, Leopold, Centralia
Lacy, N. Eugene, Kansas City
Ladenson, Roland P., Columbia
LaDriere, Raymond J., St. Louis
Laffoon, France L., Raytown
LaHue, L. D., Butler
Lakaytis, Charles A., Kansas City
Lally, James J., Kansas City
Lam, Robert L., St. Louis
Lamar, Frederick C., Kansas City
Lamar, Robert F., Kansas City
Lamb, Wanda, St. Louis
Lamb, Woodrow M., Caruthersville
Lambert, Marian, Princeton
Lamke, Charles M., Columbia
Lammert, Thomas K., New Rochelle, N. Y.
(Member St. Louis Medical Society)
Lamson, Roy C., Neosho
Lamy, John E., Sedalia
Landau, Daniel B., Hannibal
Landis, George K., Kansas City
Landree, James C., St. Louis
Lane, Clinton W., St. Louis
Laney, Ronald L., Webb City
Langan, William J., Jr., St. Louis
Lange, Adolph C., St. Louis
Langenbach, Alfred M., St. Louis
Langhus, Melvin O., North Kansas City
Langston, W. R., Springfield
Lanier, Andrew S., Fulton
Lanier, Earl W., St. Louis
Lanier, Patricia F., Fulton
Laning, J. H., Kansas City
Lankford, Harold D., Mexico
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lanning, Robert W., Ste. Genevieve
Lansche, Elmer A., St. Louis
Lapi, Angelo, Kansas City
Lapi, Ruth M., Kansas City
Lapp, Harry C., Kansas City
Lapp, John G., Kansas City
Larimore, Joseph W., St. Louis
Larkin, Rosemary R., St. Louis
Larsen, Kenneth V., St. Louis
Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Lau, Gustav A., St. Joseph
Laurenzana, Frank P., Kansas City
Lawless, Charles L., Marshall
Lawrence, Fred E., Columbia
Lawrence, George H., St. Louis
Lawrence, John R., Marshall
Lawrence, John V., St. Louis
Lawton, John T., St. Louis
Lawton, Lawrence W., St. Louis
Lawton, Thomas P., St. Louis
Layton, Ira C., Kansas City
LeBlanc, Leo J., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, A. E., Illmo
Lee, Chester E., Kansas City
Lee, Elbert J., Jr., St. Louis
Lee, George C., Kansas City
Lee, Leonard R., Bethany
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Leeper, Claude K., Address Unknown
(Member Boone County)
Legner, Stanley G., Perryville
Lehner, Richard L., Kansas City
Leidinger, Karl J., Republic
Leidler, Franz, Houston, Texas
(Member St. Louis County)
Leifer, William W., Kansas City
Leitch, Cecil G., Kansas City
Leitz, Frank B., Kansas City
Lembeck, Joseph A., St. Louis
Lemmon, George B., Springfield
Lemmon, G. Bruce, Jr., Springfield
Lemonine, Albert N., Kansas City
Lenobel, Milton I., St. Louis
Lentz, Harold C., Neosho
Leonard, Ward H., Tulsa, Okla.
(Member Jackson County)
Lerner, Abe F., Clayton
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James F., Springfield
Leslie, J. Paul, Jefferson City
Leslie, J. T., Jefferson City
Leslie, Walter L., Russellville
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
Levin, Sidney S., St. Louis
Levine, Ervan L., Vandalia
(Member Marion-Ralls-Shelby County)
Levitt, Joseph, St. Louis
Levy, Irwin, St. Louis
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Lewin, Wilbur H., St. Louis
Lewis, James E., Jr., St. Louis
Lewis, Ray B., Boonville
Lewis, Revis C., Kansas City
Lewis, William E., Kansas City
Leydig, Stanley M., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Licon, Francisco, El Paso, Texas
(Member Lincoln-St. Charles County)
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Liersch, Joseph C., Kansas City
Liese, Grover B., St. Louis
Liggett, Hiram S., St. Louis
Lilly, Terry E., Kansas City
Lilly, Terry E., Jr., Kansas City
Limbaugh, W. R., Hayti
Lindeman, Carl H., St. Louis
Lindquist, Carl N., Kansas City
Lindsay, John W., Conway
Link, Vance E., New York, N. Y.
(Member Jackson County)
Linton, C. S., Kennett
Linville, Howard E., Address Unknown
(Member Jackson County)
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Littauer, David, St. Louis
Littmann, Lewis E., Clayton
Litzow, Louis T., St. Louis
Locker, George E., Iantha
Lockhart, Charles E., Springfield
Lockwood, Ira H., Kansas City
Lockwood, W. E., Slater
Loeb, Virgil, St. Louis
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Loewy, Louise B., Kansas City
Logan, James A., Warsaw
Lohr, Curtis H., St. Louis
Londe, Sol, St. Louis
Lonergan, Warren M., St. Louis
Long, David S., Harrisonville
Long, Forrest C., Savannah
Long, Frank B., Sedalia
Long, Robert S., Kansas City
Longfield, Fred J., Lathrop
Lonsway, Maurice J., St. Louis
LoPiccolo, Vincent J., St. Louis
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Love, W. S., Nevada
Loving, B. Rush, Ballwin
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Springfield
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City

Lowenstein, Paul S., Clayton
Lowrey, Ford J., Kansas City
Lowry, Henry L., Tindall
Loyd, Earl L., Jefferson City
Lucas, John H., Brookfield
Lucido, Joseph L., St. Louis
Lucke, Eugene M., Hannibal
Luckenbill, Paul T., St. Joseph
(Member Clinton County)
Luckey, Horace L., Maplewood
Luedde, Fullerton W., St. Louis
Luedde, Philip S., St. Louis
Luman, Frank E., Edina
Lund, Herluf G., St. Louis
Lundgren, Fred H., Jr., Kansas City
Luppens, Albert F., Hickman Mills
Lurie, Harold H., Springfield
Lusk, Charles A., Jr., Butler
Luten, Drew W., St. Louis
Luter, Carter W., Butler
Lutkewitte, Joseph F., Macon, Ga.
(Member Perry County)
Lutz, Martin H., Robertson
Lyddon, Harold R., Jr., Kansas City
Lyle, Robert R., Versailles
Lyman, Edward H., St. Louis
Lynxwiler, Chester P., St. Louis
Lytle, William R., Rolla
Lyttle, G. C., St. Louis
Lytton, William B., Clayton

Mc

McAdam, Charles R., St. Louis
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(Member Chariton-Macon-Monroe-Randolph Counties)
McAfee, C. Alan, St. Louis
McAlester, Andrew W., Jr., Kansas City
McAlester, Andrew W., III, Kansas City
McArtor, Thomas R., Browning
McBurney, C. A., Slater
McCall, Edwin L., Brentwood
McCall, William K., Laddonia
McCallum, A. J. C., Aurora
McCann, Louis P., Bryan, Texas
(Member Buchanan County)
McCanse, Raymond A., Kansas City
McCarroll, Henry R., St. Louis
McCarthy, Eugene F., St. Louis
McCarthy, Thomas D., Bridgeton
McCarthy, William F., Blue Springs
McCaughan, John M., St. Louis
McClanahan, Robert C., Kansas City
McCloskey, R. Bruce, St. Louis
McClure, David N., St. Louis
McClure, Thomas C., Sikeston
McComas, Arthur R., Sturgeon
McComas, Robert E., Kansas City
McConchie, James E., Independence
McCorkle, E. Lee, Horton, Kansas
(Member Saline County)
McCormick, James E., North Kansas City
McCoy, Frederick J., Kansas City
McCoy, Warren R., Caruthersville
McCracken, Samuel R., Excelsior Springs
McCraw, Doyle C., Bolivar
McCubbin, Clarence R., Kansas City
McCubbin, J. Burleigh, Fulton
McCullough, Campbell C., Kansas City
McCunniff, William B., Kansas City
McDaniel, John R., St. Joseph
McDonald, Bruce P., Kansas City
McDonald, Eugene F., Jackson
McDonald, George H., St. Louis
McDonald, John J., St. Louis
McDonald, Wilbur P., St. Joseph
McDonnell, John F., Kansas City
McDonough, Robert C., St. James
McDowell, Frank S., St. Louis
McElroy, Glenn L., Columbia
McElvain, Robert C., St. Louis
McFadden, James F., Clayton
McFadden, James F., Jr., St. Louis
McFarland, M. D., Kansas City
McFarlane, John A., Address Unknown
(Member St. Louis Medical Society)
McGahan, John J., Crow Agency, Mont.
(Member St. Louis Medical Society)
McGannon, Paul Thomas, Kansas City
McGennis, Patrick, St. Louis
McGinnis, Abert E., St. Louis
McGinnis, Byron J., St. Louis
McGinnis, William F., St. Louis
McGlothlan, Arthur B., St. Joseph
McGuire, William A., St. Louis
McHale, Thomas C., Kansas City
McHaney, John W., Jefferson City
McIntire, Emery J., Carthage
McIntire, Landon R., St. Charles
McKaskle, Clarence W., Caruthersville
McKee, Joseph W., Kansas City
McKinstry, Karl V., DeSoto
McKnelly, William Von, Jefferson City
McLean, Royal C., Long Beach, Calif.
(Member St. Louis County)
McLelland, Richard I., Address Unknown
(Member St. Louis Medical Society)
McLeod, John, Kansas City
McMahon, Alphonse, St. Louis
McMahon, Bernard J., Clayton
McMillan, Thomas E., Kansas City
McMurray, Herbert C., Wentzville
McNalley, Frank P., St. Louis
McNamara, John J., Overland
McNamee, Owen J., St. Louis
McNamee, William F., Affton
McNearney, Joseph, St. Louis
McNeel, John O., St. Louis
McNeel, Lee A., Greenfield
McNew, William T., Carthage
McPhee, William R., San Francisco, Calif.
(Member Jackson County)
McPheeters, James W., Poplar Bluff
McPheeters, J. W., Jr., Poplar Bluff
McPherson, Owen P., Kansas City
McPike, Lloyd H., Joplin
McShane, Quentin W., St. Louis
McSwiney, John G., St. Louis
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City

M

Maas, Hermann, St. Louis
Mabrey, John P., Plattsburg
Macauley, Bernard J., Poplar Bluff
MacBryde, Cyril M., St. Louis
Macdonald, William C., St. Louis
Macdonnell, Carey R., Marshfield
Macdonnell, Thomas M., Marshfield
MacInnis, Florence E., Kansas City
Mack, Mary L., Joplin
Mack, Robert E., St. Louis
Mackey, John F., St. Louis
Macko, Joseph R., St. Louis
Maclean, John A., Monrovia, Calif.
(Member Jackson County)
Macnish, James M., St. Louis
Macon, William L., Jr., St. Louis
Maddox, Albert R., Sedalia
Maddox, John D., Joplin
Maddux, William P., Springfield
Madison, Waite H., Marshall
Magallon, Dorothy T., Memphis, Tenn.
(Member St. Louis Medical Society)
Magee, Charles D., St. Louis
Magidson, Joseph, St. Louis
Magill, Joseph S., Milan
Magness, Guy N., St. Louis
Magness, William C., Branson
Mahe, George A., Clayton
Maher, Robert W., Springfield
Maher, Thomas F., Address Unknown
(Member St. Louis Medical Society)
Mairs, Edgar J., Trenton
Maizus, Saul H., St. Louis
Major, Hermon S., Kansas City
Malinoski, Mitchell V., Poplar Bluff
Malles, A. Conrad, St. Louis
Malley, John A., Quincy, Ill.
(Member Marion-Ralls-Shelby Counties)
Mandler, George, Chillicothe
Maness, Charles E., Neosho
Manganaro, Frank J., Webster Groves
Mangels, Kenneth A., Independence
Manion, Peter J., St. Louis
Mannis, Ben G., St. Louis
Mansbacher, Kurt, St. Louis
Mansur, Edward E., Miami, Fla.
(Member Cole County)
Manting, George, St. Louis
Maples, F. H., Mount Vernon
Marcus, Edward, Springfield
Marcus, Morris D., St. Louis
Markel, Arthur D., Poplar Bluff
Marks, Mark M., Kansas City
Marmor, William A., St. Louis
Marsh, Alice, Kansas City, Kansas
(Member Jackson County)
Marshall, A. H., Charleston
Marshall, Cameron F., Kansas City
Marshall, Homer C., Springfield
Marshall, W. J., Springfield
Marston, Warren G., St. Louis
Martin, Albert J., East Prairie
Martin, Andrew D., Sikeston
Martin, Bruce C., Columbus, Ohio
(Member St. Louis Medical Society)
Martin, Charles E., St. Louis
Martin, Forrest L., Nevada
Martin, Frederick W., Jr., St. Louis
Martin, James H., Ironton
Martin, John N., Chillicothe
Martin, Maynard W., St. Louis
Martin, Raymond T., St. Louis
Martin, Samuel P., East Prairie
Martin, Thomas M., St. Louis
Martin, W. E., Odessa
Marty, Loraine A., Lakeview Heights
(Member Jackson County)
Martz, John C., Webster Groves
Mason, Roy E., St. Louis
Massie, Edward, St. Louis
Masters, William H., St. Louis
Masterson, Melvin L., Waco, Texas
(Member of Lafayette-Ray Counties)
Mastin, E. Vernon, St. Louis
Mathae, George H., St. Louis
Mathes, Sydney B., St. Louis
Mathewson, Hugh S., Kansas City
Matteson, Frank B., Grant City
Matthews, John G., St. Louis
Matthews, John I., Jefferson City
Mattis, Robert D., St. Louis
Maughs, Sydney B., St. Louis
Max, Clarence O. C., St. Louis
Max, Paul F., St. Louis
Maxey, Hugh W., Jefferson City
Maxson, T. Red, Warrensburg
Maxwell, Richard W., University City
May, Benjamin F., St. Louis
May, James W., Kansas City
Mayer, John H., Jr., Kansas City
Mayer, Robert A., St. Louis
Mayfield, James L., Washington
Mays, Frank G., Washington
Maze, Lawrence E., St. Louis
Mazur, Herbert A., St. Louis
Mead, Samuel T., Slater
Mead, Sedgwick, St. Louis
Meador, James R., Clayton
Meagher, Arthur J., Portsmouth, Va.
(Member St. Louis County)
Medler, Francis J., St. Louis
Mehan, George T., St. Louis
Meier, F. X., Jefferson City
Meinberg, William H., St. Louis
Meiners, Edwin P., St. Louis
Meiners, Theodore M., Webster Groves
Meinershagen, C. W., Jefferson City
Meinhardt, Ralph E., Harlingen, Texas
(Member Jasper County)
Meisenbach, A. Edward, St. Louis
Melgaard, S. Ross, Kansas City
Melick, William F., St. Louis
Mellies, Eugene G., St. Louis
Mellies, George A., St. Louis
Meluney, S. E., St. Joseph
Mendeloff, Albert I., St. Louis
Mendonsa, Elsa L., University City
Mendonsa, Lawrence E., St. Louis
Merenda, Sam J., St. Louis
Merklin, Anton L., St. Louis
Merritt, Burch A., St. Louis
Merz, Jean J., St. Louis
Metz, Charles O., St. Louis
Meyer, Claude B., Springfield
Meyer, Curtis A., St. Louis
Meyer, Herman M., St. Louis
Meyer, James E., Ballwin
Meyer, Oscar D., St. Louis
Meyer, Paul W., Kansas City
Meyerhardt, Milton H., St. Louis
Meyers, John B., St. Louis
Meyers, Montague M., Address Unknown
(Member St. Louis Medical Society)
Mezera, Raymond A., University City
Michael, Vernon E., St. Louis
Michaelis, B. A., Fredericktown
Michaelree, John F., Maplewood
Mickel, Arthur A., Cassville
Middleman, Isadore C., St. Louis
Middleton, John W., Louisiana
Mier, Thomas M., St. Louis
Milder, Benjamin, St. Louis
Miles, George O., Kansas City
Miles, Paul W., St. Louis
Miller, Charles, Jr., St. Louis
Miller, Charles W., St. Louis
Miller, Clinton L., Lee's Summit
Miller, Clyde S., Waynesville
Miller, D. Herbert, Muskogee, Okla.
(Member Chariton-Macon-Monroe-Randolph Counties)
Miller, Dean M., Platte City
Miller, Eugene A., St. Joseph
Miller, Gerald L., Kansas City
Miller, H. Edward, St. Louis
Miller, Howard S., Macon
Miller, Jack G., Atlanta, Ga.
(Member Buchanan County)
Miller, Leroy J., Columbia
Miller, Oliver J., Cape Girardeau
(Member Perry County)
Miller, Perry B., Detroit, Mich.
(Member St. Louis Medical Society)
Miller, Wade H., Kansas City
Miller, Walter P., Kansas City
Miller, Wilson H., Kansas City
Millikin, Lester A., St. Louis
Mills, Warren B., St. Louis

Milster, Clyde R., St. Louis
Miltenberger, Paul C., Kennett
Miltenberger, Val E., Kirksville
Minton, Robert S., St. Joseph
Minton, William H., St. Joseph
Missey, Wilburn C., St. Louis
Mistachkin, Norman L., St. Louis
Mitchell, Ernest, Goodman
Mitchell, Robert H., Kansas City
Mitchell, Roy E., Salem
Mitchell, Samuel E., Malden
Mixson, William C., Kansas City
Modlin, John J., Columbia
Moeller, Carl E., St. Louis
Moen, Berwyn H., St. Joseph
Moennighoff, Fritz J., Monett
Mohler, Elbert M., Jr., Senath
Molden, Charles A., St. Louis
Molholm, Hans B., Columbus, Ohio
(Member St. Louis Medical Society)
Monahan, Elmer P., Kansas City
Monat, Seymour, St. Louis
Monroe, Alfred E., Kansas City
(Member Pettis County)
Montani, Charles, St. Louis
Montello, Samuel Anthony, Kansas City
Montgomery, James G., Kansas City
Montgomery, John S., Milan
Mooney, Justin Loeb, Kansas City
Mooney, Marcel L., Kansas City
Moore, Carl V., St. Louis
Moore, Harry G., St. Louis
Moore, Neil S., St. Louis
Moore, Robert A., Kansas City
Moore, Robert A., Pittsburgh, Pa.
(Member St. Louis Medical Society)
Moore, Sherwood, St. Louis
Moore, Walter L., Clayton
Moore, William A., St. Louis
Moore, William E., Normandy
Morest, F. Stanley, Kansas City
Morfit, John C., Clayton
Morgan, David B., Kansas City
Morley, Louise A., Kansas City
Morrin, Kevin C., St. Louis
Morris, Clyde L., Caruthersville
Morris, Harvey E., St. Louis
Morris, Mary E., St. Louis
Morris, Robert C., Nevada
Morrison, G. B., Nevada
Morrow, Raymond L., Kansas City
Morroway, James H., St. Joseph
Morse, Marvin, St. Joseph
Morton, Paul C., Springfield
Moskop, Peter G., St. Louis
Moss, Paul, Kansas City
Moss, William T., Wilmette, Ill.
(Member St. Louis County)
Mosser, Robert S., Independence
Mott, James R., Hartville
Motzel, Albert J., St. Louis
Mountjoy, Grace S., St. Louis
Mowrey, William O., St. Louis
Moyer, Carl A., St. Louis
Muckerman, Richard I. C., St. Louis
Mudd, J. Gerard, St. Louis
Mudd, James L., St. Louis
Mueller, Charles B., St. Louis
Mueller, Clarence E., St. Louis
Mueller, Joseph A., St. Louis
Mueller, Martin J., Kansas City
Mueller, Morris A., Clayton
Mueller, Ralph E., Phoenix, Ariz.
(Member Jackson County)
Mueller, Robert, St. Louis
Mueller, Robert J., St. Louis
Mueller, W. K., St. Louis
Muench, Albert H., St. Joseph
Muench, Ludwig O., Washington
Muenster, Joseph J., Chicago, Ill.
(Member St. Louis Medical Society)
Muether, Raymond O., St. Louis
Mullarky, Wilbur A., St. Louis
Mullen, Jack, Bonne Terre
Mullen, Leo M., Kansas City
Mulligan, Leo V., St. Louis
Mullinax, Orr, St. Joseph
Mullins, Bernard L., N. Kansas City
Multhauf, Cyril J., Kansas City
Mundy, H. F., St. Joseph
Mundy, William L., Kansas City
Munsch, Augustin P., St. Louis
Munsch, Girard A., St. Louis
Murphy, Bernard L., Hannibal
Murphy, James Patrick, St. Louis
Murphy, Jerome P., Mission, Kansas
(Member Jackson County)
Murphy, John C., St. Louis
Murphy, John P., St. Louis
Murphy, Paul, St. Louis
Murphy, Robert J., Kansas City
Murray, John W., Houston, Texas
(Member Pettis County)
Murray, Louis F., St. Louis
Muschany, Norman K., Troy
Musgrave, David E., Excelsior Springs
Musgrave, Paul W., Address Unknown
(Member Nodaway-Atchison-Gentry-Worth Counties)
Musick, James D., Springfield
Musser, Richard E., Waynesville
Mutschnick, Clara P., St. Louis
Myers, E. Lee, St. Louis
Myers, James M., Rolla
Myers, John L., Ketchikan, Alaska
(Member Jackson County)
Myers, John S., Kansas City
Myers, Ralph R., Address Unknown
(Member Jackson County)
Myers, Robert M., Kansas City
Myers, Roy E., Joplin
Myers, Wilson A., Kansas City

N

Nakada, James R., St. Louis
Napper, Marvin L., Springfield
Naryka, Joseph J., St. Louis
Nash, Helen E., St. Louis
Nash, W. Hampton, St. Louis
Neal, M. Pinson, Columbia
Needels, Orval T., Kansas City
Neff, Robert L., Joplin
Neilson, Arthur W., St. Louis
Neilson, Charles H., St. Louis
Nelson, Charles S., Kansas City
Nelson, Fred L., Kansas City
Nelson, William, St. Louis
Nemec, Stanley S., St. Louis
Ness, Carl K., St. Joseph
Nester, Charles A., St. Louis
Nester, Gerard A., St. Louis
Netherton, George F., Cameron
Neubeiser, Ben L., St. Charles
Neumann, Roland F., Jr., St. Louis
Neun, W. F., St. Louis
Newlon, John S., Nevada
Newman, Harold G., St. Louis
Newman, Mary Jane, Cassville
Newman, Percy, St. Louis
Newton, Henry O., La Plata
Nichols, Charles E., St. Louis
Nichols, Frank J., Fulton
Nichols, Samuel I., Address Unknown
(Member Lincoln-St. Charles County)
Nicholson, Clarence M., St. Petersburg, Fla.
(Member St. Louis Medical Society)
Nickson, Charles E., Jr., Independence
Nicolai, Charles H., St. Louis
Nicolay, Kenneth S., Kansas City
Niedermeyer, Edward L., Tarkio
Niedermeyer, F. P., Kansas City
Niederwimer, John, Koch
Nienstedt, Elam J., Sikeston
Niesen, Frank J., St. Louis
Nifong, Frank G., Columbia
Nigro, D. M., Kansas City
Nigro, E. Robert, Kansas City
Nigro, Joseph A., Kansas City
Nisbet, Eliga B., Odessa
Nix, W. K., Marshall
Nixon, Edward E., Gallatin
Noah, Joseph W., St. Louis
Nofles, James W., St. Louis
Nolan, Charles J., St. Louis
Noller, Henry W., St. Louis
Noltensmeyer, Milton N., Kansas City
Norman, Robert M., Ava
North, William R., Address Unknown
(Member St. Louis County)
Northup, Glenn R., St. Louis
Norton, Harry B., Hannibal
Norton, William H., St. Louis
Nuetzel, John A., St. Louis
Nulton, Ida May, Lancaster
Nunn, Pat Morris, Kansas City, Kansas
(Member Jackson County)
Nussbaum, Paul B., Cape Girardeau
Nussbaum, Robert A., St. Louis
Nye, Robert S., St. Louis

O

Obermeyer, Charles G., St. Louis
O'Brien, Edward C., Shreveport, La.
(Member St. Louis Medical Society)
O'Brien, Harry F., Mexico
O'Brien, James A., Wichita, Kansas
(Member Greene County)
O'Brien, Leo A., Kansas City
O'Brien, Raymond W., Kansas City
O'Brien, Robert M., St. Louis
Obrock, Louis C., St. Louis
O'Connell, Frank A., Kansas City
O'Connell, John, St. Louis
O'Connell, P. J., Kansas City
O'Connor, William B., St. Joseph
Odell, Richard T., St. Louis
O'Dell, Timothy T., Oran
O'Donnell, Joseph V., St. Louis
O'Donoghue, James, St. Joseph
O'Dowd, James A., St. Louis
Oehler, William F., Cape Girardeau
Ogilvie, John H., Kansas City
Oglevie, Rial R., Kansas City
Ogura, Joseph H., Brentwood
O'Hearne, John J., Kansas City
Ohmoto, Masao, St. Louis
O'Keefe, C. D., St. Louis
Old, Jacob W., Jr., Houston, Texas
(Member Jasper County)
O'Leary, James L., St. Louis
Olmsted, William H., St. Louis
Olson, Erwin T., Newton, Kansas
(Member Grand River Society)
O'Malley, Eugene J., St. Louis
O'Malley, James F., Kansas City
O'Neal, Lawrence W., St. Louis
O'Neil, James H., Kansas City
O'Neill, John B., St. Louis
Oppenheimer, Henry E., St. Louis
O'Reilly, Daniel E., St. Louis
Orenstein, Joseph M., St. Louis
Orgel, M. Norman, St. Louis
Orr, Charles H., Ash Grove
Orrahood, M. David, St. Louis
Osborne, Charles D., Sedalia
Osgood, George M., Kansas City
Ossman, Julian A., Jefferson City
O'Sullivan, George A., St. Louis
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Rodgers, Elrie P., 101 West Broadway
Scheuber, Charles, Professional Bldg.
Schwarz, Henry II, 206 Thilly
See, William B., Professional Bldg.
Simpson, Lloyd, Miller Bldg.
Smith, Gladys G., University Hospital, 800 N.E. 13th St., Oklahoma City, Okla.
Smith, Stephen D., 1404 E. Broadway
Sodeman, William A., 103 Parker Hospital
Stewart, William J., 909 University Ave.
Stine, Dan G., Camdenton
Suggett, Finis C., 805 Broadway
Sweets, Henry H., Jr., 909 University Ave.
Thomas, Helen E. Yeager, 208 Westmount
Thomas, Horace E., 909 University Ave.
Tinsley, John C., Jr., Ellis Fischel Hospital
Trimble, George X., University of Missouri
Waggoner, Charles M., Professional Bldg.
Walters, John H., Guitar Bldg.
Walters, Laura, Guitar Bldg.
Washington, Edward Lee, 909 University Ave.
Wendell, Margaret R., Stephens College Health Center
Windmiller, Myrl E., 401 Guitar Bldg.

BUCHANAN COUNTY MEDICAL SOCIETY
(St. Joseph)

Allaman, John M., 216 Physicians & Surgeons Bldg.
Almada, Albert A., Porterville State Hospital, Porterville, Calif.
Ames, William H., 902 Edmond St.
Beck, Leroi, 1618 N. Third St.
Benson, Scott C., 510 Corby Bldg.
Berney, Francis J., 1225 N. 10th St.
Biggins, Cloice H., 1302 Faraon
Boteler, George McC., 105 N. 9th St.
Bristow, Robert B., Physicians & Surgeons Bldg.
Brumm, Harold J., P. O. Box 747
Buck, Ronald, 902 Edmond St.
Butler, E. F., 902 Edmond St.
Carle, H. W., Jr., 2117 Lovers Lane
Carpenter, George T., 902 Edmond St.
Chiarottino, Joseph F., 1302 Faraon
Conrad, Robert W., 404 Tootle Bldg.
Craig, Owen W. D., 405 Tootle Bldg.
Dawson, Orville L., 1302 Faraon
Day, Maxwell, 1104 4th St., Rapid City, S. Dak.
DuMont, Clement C., 1905 Francis St.
Eliscu, Fred, 212 S. 17th St.
Elliott, John R., 801½ Francis St.
Ferguson, Luther J., 723½ Felix
Fisher, Joseph L., 824 Edmond St.
Forgrave, John R., 420 N. 8th St.
Forgrave, Leon P., 420 N. 8th St.
Forman, George W., P. O. Box 747
Fuson, Levi H., Kirkpatrick Bldg.
Grant, Claude S., 1302 Faraon
Greenberg, Charles, Physicians & Surgeons Bldg.
Grimes, M. E., Kirkpatrick Bldg.
Handler, Eric, Physicians & Surgeons Bldg.
Hansen, Walter J., 2802 Jule St.
Hartigan, Frank X., 2232 Eugene Field
Herman, Allen I., 301 Physicians & Surgeons Bldg.
Howden, Thomas L., 407 Kirkpatrick Bldg.
Hughes, Judson M., Kirkpatrick Bldg.
Hull, Walter S., Faucett
Hunt, William J., 2600 Pacific St.
Ide, Lucien W., P. O. Box 747
Kieber, Robert W., 317 Kirkpatrick Bldg.
Kirk, John S., 202 Physicians & Surgeons Bldg.
Knepper, P. A., Box 747
Kulowski, Jacob, 415 Corby Bldg.
Lau, Gustav A., 217 Kirkpatrick Bldg.
McCann, Louis P., U.S.A.F. Base, Bryan, Texas
McDaniel, John R., 902 Edmond St.
McDonald, Wilbur P., 301 N. 8th St.
McGlothlan, Arthur B., 824 Edmond St.
Meluney, S. E., 214 Kirkpatrick Bldg.
Miller, Eugene A., 1400 N. 25th St.
Miller, Jack G., Address Unknown
Minton, Robert S., 705 Corby Bldg.
Minton, William H., 705 Corby Bldg.
Moen, Berwyn H., 902 Edmond St.
Morroway, James H., State Hospital No. 2
Morse, Marvin, 2702 Faraon
Muench, Albert H., 215 Physicians & Surgeons Bldg.
Mullinax, Orr, State Hospital No. 2
Mundy, Homer F., 2801 Sacramento
Ness, Carl K., 902 Edmond St.
O'Connor, William B., 219 Kirkpatrick Bldg.
O'Donoghue, James, P. O. Box 747
Paul, Thomas M., St. Francis Hotel
Petersen, H. E., 212 Kirkpatrick Bldg.
Pifer, Lawrence H., 1218 N. Third St.
Potter, Thompson E., 731 Faraon St.
Redmond, William, 411 Corby Bldg.
Reed, Edsel S., 824 Edmond St.
Riddell, Richard V., 902 Edmond St.
Rosenthal, Irwin I., 2715 Union
Rost, William B., 3113 Renick St.
Roundy, Collis I., Kirkpatrick Bldg.
Ryan, John H., 301 N. 8th St.
Saferstein, T. Harry, 2903 Sherman
Sauer, Gordon C., 902 Edmond St.
Schertz, Truman B., 902 Edmond St.
Senne, Herbert C., Physicians & Surgeons Bldg.
Senor, Samuel D., 722½ Francis St.
Senor, Samuel E., 722½ Francis St.
Shevlin, Charles F., 902 Edmond St.
Simmons, Benjamin B., 801½ Francis St.
Smith, Andrew J., Physicians & Surgeons Bldg.
Smith, Clifton, 2502 Faraon
Spencer, Floyd H., 404 Kirkpatrick Bldg.
Stacy, Winton T., 379 Evacuation Hospital, A.P.O. 46, c/o P.M., New York, N. Y.
Stamey, James T., 2624 St. Joseph Ave.
Tadlock, Baxter W., 703 S. 13th St.
Tahir, Mohammad, 228 Illinois Ave.
Thomas, Forrest, State Hospital No. 2
Thompson, F. G., Jr., P. O. Box 747
Timerman, Arthur R., 234 Illinois Ave.
Wachter, Harry E., 212 Kirkpatrick Bldg.
Wadlow, Ernest E., Kirkpatrick Bldg.
Waggoner, Sharon E., 301 Illinois Ave.
Warres, Herbert L., 902 Edmond St.
Whitsell, John C., 824 Edmond St.
Whitsell, Ora E., 824 Edmond St.
Willumsen, Henry C., P. O. Box 747

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY

Barbour, Marvin R., Poplar Bluff
Baskett, Edgar D., Poplar Bluff
Biggs, Fred J., Jr., Poplar Bluff
Brandon, Walter L., Poplar Bluff
Brookreson, Alton F., Poplar Bluff
Canlas, Emilio M., Poplar Bluff
Clay, Hampson S., Poplar Bluff
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Cutts, F. William, Poplar Bluff
Dinelli, Frank E., Poplar Bluff
Engelhardt, Robert C., Poplar Bluff
Gernstetter, Sangwill L., Poplar Bluff
Harwell, J. Lester, Poplar Bluff
Harwell, James Lee, Poplar Bluff
Henrickson, H. O., Poplar Bluff
Henrickson, Hardin M., Poplar Bluff
Henrickson, William E., Poplar Bluff
Johnson, Frank C., Doniphan
Kneibert, Fred L., Poplar Bluff
Loughead, John R., Poplar Bluff
McPheeters, James W., Poplar Bluff
McPheeters, J. W., Jr., Poplar Bluff
Macauley, Bernard J., Poplar Bluff
Malinoski, Mitchell V., Poplar Bluff
Markel, Arthur D., Poplar Bluff
Parker, A. C., Jr., Poplar Bluff
Post, Cyril A., Poplar Bluff
Spauding, William, Poplar Bluff
White, Homer E., Naylor
Williams, James E., Doniphan
Willis, Norman E., Poplar Bluff

CALDWELL COUNTY

(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY

Blasko, John J., Cedar Crest, Newington, Conn.
Brown, John J., Fulton
Cremer, William J., Fulton
Crews, Robert N., Fulton
Durst, Henry, Fulton
Fowler, J. Henry, Fulton
Gish, Rutledge, Fulton
Glotfelty, Henry W., 600 Caldwell St., Piqua, Ohio
Hall, Robert G., Nevada
Hanks, Ralf, Fulton
Hunter, James R., Fulton
Lanier, Andrew S., Fulton
Lanier, Patricia F., Fulton
McCubbin, J. Burleigh, Fulton
Nichols, Frank J., Fulton
Price, Robert P., Fulton
Rusk, Earl McD., New Bloomfield
Williamson, William H., Mokane
Wood, George F., Fulton

CAMDEN COUNTY MEDICAL SOCIETY

Claiborn, Edward G., Camdenton

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY

(Cape Girardeau)

Ashley, Hugh, Jr., 711a Broadway
Ashley, Hugh V., 711 Broadway
Barnes, Seth S., 1854 Broadway
Blaylock, Richard D., Oak Ridge
Campbell, Edward D., 701a Good Hope St.
Cochran, Jo R., 709a Broadway
Cook, Norman L., St. Francis Hospital
Crites, Edward, Sedgewickville
Crowe, John T., Farmers & Merchants Bank Bldg.
Davault, Webster W., Delta
Drace, James J., P. O. Box 154
Elrod, Dennis B., 1912 Broadway
Estes, Albert M., 714 Broadway
Ford, Walter W., Gordonville
Fuerth, Arthur L., Hirsch Bldg.
Hall, Frank W., 826 Themis St.
Herbert, Charles T., 824 Good Hope St.
Jaeger, Joseph N., Jackson
Juden, Alexander G., 714 Good Hope St.
Keim, John H., 801a Broadway
Kinder, James A., 826 Themis
Lovinggood, Thomas A., St. Francis Hospital
McDonald, Eugene F., Jackson
Nussbaum, Paul B., 1758 Broadway
Oehler, William F., 234 N. Middle St.
Otto, Thomas G., 1912 Broadway
Rapp, Harold B., 1011 N. Henderson
Reynolds, Garland A., 826 Themis St.
Ridings, Harold D., 1858 Broadway
Ritter, Raymond A., St. Johns Hospital
Ruff, Troy E., 206 Guthrie Bldg., Paducah, Ky.
Schulz, Gustav B., 605 Broadway
Seabaugh, D. Rusby, 801a Broadway
Seabaugh, Dayton I. L., Jackson
Seabaugh, L. R., 801a Broadway
Seabaugh, Oda L., 720 South Blvd.
Seabaugh, William O. L., 24 N. Sprigg
Shelby, Mitchell H., 726 Themis St.
Shoss, Milton, St. Francis Hospital
Sutton, Charles E., 6 S. Fountain
Trolinger, J. H., Jackson
Tygett, Glenn J., 215 N. Sprigg St.
Wescoat, William H., 318 Broadway
Wilson, Charles F., 714 Broadway
Wolff, Paul G., 727 Broadway
Zimmermann, Carl A. W., Oakenwold R.F.D. Box 18.

CARROLL COUNTY

(Grand River Medical Society)

CARTER-SHANNON COUNTY MEDICAL SOCIETY

Cotton, Tolman W., Van Buren
Davis, Robert I., Birch Tree
Rollins, H. D., Winona

CASS COUNTY

(West Central Missouri Medical Society)

CEDAR COUNTY

(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Anderson, Dwight W., Moberly
Baker, Josephine D., Moberly
Barnett, Floyd A., Paris
Buck, Ulysses G., Rothville
Campbell, James E., Macon
Chute, W. Deward, Moberly
Cohrs, Clarence C., Moberly
Dreyer, Philip V., Huntsville
Eggleston, Donald E., Macon
Erni, Harry E., Macon
Fellows, William W., Veterans Hospital, Albany, N. Y.
Fleming, Jacob W., Jr., Moberly
Fleming, Thomas S., Moberly
Hardy, John W., Sumner
Harms, Florian L., Salisbury
Hasson, Robert, Moberly
Hawkins, George W., Salisbury
Huber, Lasley E., Moberly
Hyatt, William T., 3805 S. Broadway, St. Louis
Johnson, Edward M., Macon
McAdam, James D., Address Unknown
Miller, D. Herbert, Veterans Hospital, Muskogee, Okla.
Miller, Howard S., Macon
Newton, Henry O., LaPlata
Petty, Wallace S., Macon
Ragsdale, George M., Paris
Rice, Grover C., Brunswick
Rowlette, A. P., Moberly
Smith, Carl C., Moberly
Streetor, Roderick D., 1332 Blackstone Ave., St. Louis
Stuart, Daniel D., Brunswick
Szymanski, Stanley R., Moberly
Weger, Carl C., Keytesville
West, William D., Address Unknown
Young, Robert H., Moberly

CHRISTIAN COUNTY

(Ozarks Medical Society)

CLARK COUNTY

(Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Andrews, Berneil W., North Kansas City
Baird, J. Edward, Excelsior Springs
Chastain, Maurice W., North Kansas City
Dunham, R. H., North Kansas City
Dwyer, Reinhardt D., North Kansas City
Edwards, Theodore F., North Kansas City
Fischer, Edward H., North Kansas City
Fowler, I. Charles, North Kansas City
Gay, Elmer E., Richmond
Goodson, William H., Liberty
Hardegree, Harvey, Nichols Vet. Adm. Hospital, Louisville, Ky.
Hendren, Glen W., Liberty
Hobbs, Earl B., Smithville
Hodge, Robert H., North Kansas City
Horton, Ray B., North Kansas City
Houck, Russell M., V. A. Hospital, Richmond, Va.
Knox, Earl R., 224 Rialto Bldg., Kansas City
Langhus, Melvin O., North Kansas City
McCormick, James E., North Kansas City
McCracken, Samuel R., Excelsior Springs
Mullins, Bernard L., North Kansas City
Musgrave, David E., Excelsior Springs
Parker, Robert H., North Kansas City
Pate, O. S., North Kansas City
Porter, Russell C., 831 N. Camino Miramonte, Tucson, Ariz.
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Sanders, George E., Excelsior Springs
Schroeder, Sidney O., Liberty
Seidel, Joshua, Starkey Manor, Kerrville, Texas
Spelman, Archibald E., Smithville
Sprong, Aaron A., Excelsior Springs
Tripodi, Donald W., Excelsior Springs
Washburn, Walter L., North Kansas City
Waterman, F. M., Liberty
Werner, Dean F., North Kansas City
Willoughby, James W., Liberty
Withrow, John B., North Kansas City
Zick, Walter J., Smithville

CLINTON COUNTY MEDICAL SOCIETY

Kimes, Ira D., Cameron
Longfield, Fred J., Lathrop
Luckenbill, Paul T., 512 N. Eighth St., St. Joseph
Mabrey, John P., Plattsburg
Netherton, George F., Cameron
Spalding, Wilber B., Plattsburg
Wilbur, Ronald E., Cameron

COLE COUNTY MEDICAL SOCIETY

(Jefferson City)

Amos, James R., 98 Meadow Lane
Belden, Edgar A., State Office Bldg.
Bohrer, E. Royse, 322 Jefferson St.
Bruce, James G., 234 Madison
Clark, Kendall A., 420 East High St.
Cox, William A., 125 E. High
Dorris, Richard P., Trust Bldg.
Enlow, Lawrence D., Trust Bldg.
Exon, C. Stuart, 503 East High St.
Garner, Lynn M., State Division of Health
Gillham, Frank W., 419 E. Capitol Ave.
Guhleman, Henry V., Jr., 506 East High St.
Gurnee, Landon, H., 301 Central Trust Bldg.
Kanagowa, H., Dallmeyer Bldg.
Kelly, Marshall W., 507 East High St.
Klebba, Larry B., 712 W. High St.
Leslie, J. Paul, Central Trust Bldg.
Leslie, J. T., 933 Fairmount
Leslie, Walter L., Russellville
Loyd, Earl L., 425 Madison St.
McHaney, John W., Trust Bldg.
McKnelly, William von, 1111 Moreau Drive
Mansur, Edward E., 2012 N. W. 13th St., Miami, Fla.
Matthews, John I., 425 Madison St.
Maxey, Hugh W., 626a Jefferson
Meier, F. X., 507 East High St.
Meinershagen, Charles W., 138 Forest Place
Ossman, Julian A., 2030 W. Main St.
Richardson, R. G., 421 Lafayette
Sennott, John S., 507 East High St.
Shirley, George H., Eugene
Shull, George D., 521 East High St.
Stauffer, Harry B., Central Trust Bldg.
Stephan, August P., 98 W. Circle Drive
Stricker, Harold C., 21 Hobbs Terrace
Sugarbaker, Everett D., 2313 W. Main, Orchard Acres
Summers, Joseph S., Trust Bldg.
Summers, Joseph S., Jr., 114 W. Circle Drive
Tanner, Robert H., 7551 Personnel Processing Squadron, c/o P.M., New York, N. Y.
Taylor, Herbert I., 111 E. Circle Drive
Taylor, Leon A., 129 East High St.
Watts, Byron E., 234 Madison Ave.

COOPER COUNTY MEDICAL SOCIETY

Beckett, Theodore C., Boonville
Boley, James O., 3200 E. Meyer Blvd., Kansas City
Chamberlain, Gilbert L., New Franklin
Diekroeger, Manuel L., Boonville
Huelsmann, Donald, 207 Oak St., N. E., Albuquerque, N. Mex.
Humphreys, Edward T., Boonville
Lewis, Ray B., Boonville
Sandy, Charles, Prairie Village, Kansas
Stone, William E., Boonville
Stuart, Byron M., Boonville
Suarez, Nelson, Slater
Wilcox, Howard L., 20 Oak St., Belmont, Mass.
Winn, George W., Boonville
Ziegler, William H., Boonville

CRAWFORD COUNTY

(Phelps-Crawford-Dent-Pulaski-Maries County Medical Society)

DADE COUNTY

(Barton-Dade County Medical Society)

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

Barnett, C. H., Bolivar
Brooks, John M., Diamond
Glasco, Loren A., Urbana
Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Harrell, Henry J., Morrisville
McCraw, Doyle C., Bolivar
Plummer, Grover C., Buffalo
Robinson, George G., Humansville

DAVIESS COUNTY
(Grand River Medical Society)

DEKALB COUNTY
(Grand River Medical Society)

DENT COUNTY
(Phelps-Crawford-Dent-Pulaski-Maries County Medical Society)

DOUGLAS COUNTY
(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Bailey, S. M., Address Unknown
Baldwin, Paul, Kennett
Beal, Homer, Malden
Bell, Exter F., Jr., 3720 Jardin St., Houston, Texas
Belsey, Wallace A., Campbell
Cofer, James C., Kennett
Dempsey, D. T., Kennett
Dunmire, George Q., Kennett
Edmondson, Charles T., Malden
English, Wallace D., Cardwell
Fuzzell, Jameso, Kennett
Green, Robert S., Kennett
Hopkins, F. G., Gideon
Linton, C. S., Kennett
Miltenberger, Paul C., Kennett
Mitchell, Samuel E., Malden
Mohler, Elbert M., Jr., Senath
Park, William E., Cardwell
Peck, Chester R., Jr., Kennett
Rutledge, William J., Campbell
Speidel, Frederick W., Senath
Spence, Elbert L., Kennett
Tarver, Quinton, Kennett
Van Cleve, John D., Malden
Williams, Charles S., Malden
Wilson, Loys C., Kennett
Zimmerman, Joseph A., Kennett

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Andreassen, Dimil F., Dillingham, Alaska
Bozzo, Raymond J., Washington
Brenner, Paul A., Owensville
Briegleb, Charles F., 4624 Cedar Oaks Lane, Belaire, Texas
Crawford, Robert M., Sullivan
de la Torre, John J., Sullivan
Denny, Hubert M., Union
Ecker, Decider B., Pacific
Eisenmann, Benj. P., New Haven
Eyermann, H. W., Warrenton
Hoelscher, Harold F., Warrenton
Johnson, Grover C., Marthasville
Keller, Robert M., Owensville
Kitchell, William E., St. Clair
Mayfield, James L., Washington
Mays, Frank G., Washington
Muench, Ludwig O., Washington
Pearl, John F., St. Clair
Peterson, Merle H., Sullivan
Richardson, William R., Union
Royse, Roy P., Sullivan
Ryan, John B., Hermann
Schmidt, Charles A., Washington
Schmidt, Herbert H., Washington
Schwartz, Alfred J. C., Washington
Shaw, Carvel T., 5107 Blanco, El Paso, Texas
Steinbeck, Herbert D., Union
Strehlman, Benjamin G., Union
Wepprich, Michael S., Washington
Workman, George M., Hermann

GASCONADE COUNTY
(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY
(Nodaway-Atchison-Gentry-Worth County Medical Society)

GRAND RIVER MEDICAL SOCIETY
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb County Medical Society)

Allen, Erroll W., Carrollton
Atwood, J. Morris, 2916 W. 72nd St., Prairie Village, Kansas
Atwood, William G., Carrollton
Bales, Eugene L., Carrollton
Berry, Paul T., Marceline
Bohnsack, Ralph W., Brookfield
Booth, Herbert R., Hamilton
Breid, Jacob, Spickard
Brennan, Raymond J., Chillicothe
Brewer, Lake, Ridgeway
Bristow, Arthur S., Princeton
Bristow, George B., Beale Air Force Base Hospital, Marysville, Calif.
Brownfield, Samuel T., Brookfield
Broyles, Watkins A., Bethany
Carpenter, George W., Chillicothe
Carter, Howard, Browning
Clark, Chester Lee, Trenton
Collier, Alfred, Chillicothe
Conrad, Joseph, Chillicothe
Cullers, Charles H., Trenton
Daley, Frank R., Hamilton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Duffy, Edgar A., Trenton
Duffy, Oliver F., Trenton
Ellis, William W., Marceline
Fair, William L., Chillicothe
Fuson, William A., Trenton
Gale, Joseph F., Chillicothe
Gearhart, M., Bethany
Grace, Charles M., Chillicothe
Haley, Roy R., Brookfield
Haskell, Ralph E., Norborne
Johnson, Glenn D., Maysville
Kimberlin, Herbert C., Trenton
Lambert, Marian, Princeton
Lee, Leonard R., Bethany
Lowry, Henry L., Tindall
Lucas, John H., Brookfield
McArtor, Thomas R., Browning
Magill, Joseph S., Milan
Mairs, Edgar J., Trenton
Mandler, George, Chillicothe
Martin, John N., Chillicothe
Nixon, Edward E., Gallatin
Olson, Erwin T., 703 E. Broadway, Newton, Kansas
Parker, John Z., Pattonsburg
Perry, John M., Princeton
Pickett, Clarence P., Princeton
Platz, John H., Carrollton
Quisito, Joseph M., Trenton
Sellers, C. J., Mt. Moriah
Smith, Robert W., Marceline
Staton, R. Hamilton, Carrollton
Sweiger, James H., Maysville
Thompson, Emma A. B., Columbia
Vandiver, Virgil D., Chillicothe
Webb, J. W., Brenkenridge
Weston, Ursa C., Galt
Wilson, Fred K., Winston
Zahrt, Frank H., Princeton

GREENE COUNTY MEDICAL SOCIETY
(Springfield)

Allen, Jerry H., 1324 S. Fairway Terrace
Anthony, Dallas, Professional Bldg.
Ashley, Thomas E., 1365 South Kansas
Atherton, Mary Jean, McDaniel Bldg.
Barber, John J., Address Unknown
Boots, Roger H., V. A. Hospital, Wadsworth, Kansas
Box, Earnest M., 412 E. Commercial St.
Brown, Lyman D., 307½ College
Bruton, Tyrrel S., Woodruff Bldg.
Burke, Walter H., Woodruff Bldg.
Busiek, Paul J., 303 Professional Bldg.
Busiek, Urban J., 303 Professional Bldg.
Callaway, Guy D., 801 S. Kickapoo
Callaway, Guy D., Jr., 205 E. St. Louis
Chinburg, Kenneth, Medical Arts Bldg.
Clarke, Michael J., Morton Bldg.
Clayton, Edgar L., 109 Professional Bldg.
Coffelt, Kenneth C., 800 Medical Arts Bldg.
Coller, Frederick C., 1211 S. Pickwick
Conrad, Raymond C., 609 Cherry St.
Craig, Arthur D., 1046 E. Delmar
Crawford, Oral B., 215 Professional Bldg.
Cunningham, Darral D., 1715 Boonville
Delzell, William A., 410 McDaniel Bldg.
Dietz, M. Wendell, Burge Hospital
Dillard, Erin M., Professional Bldg.
Dills, Joseph N., Professional Bldg.
Dimond, Edgar A., 1514 Fairway Dr.
Duncan, Robert D., 302 Professional Bldg.
Elkins, Ronald F., 402 Professional Bldg.
Ellis, Francis J., 304 Professional Bldg.
Epps, Curtis, 800 Medical Arts Bldg.
Esch, John G., Republic
Evans, Ezra L., 609 Cherry St.
Evans, Ezra L., Jr., Professional Bldg.
Farthing, Fred R., 1234 E. Walnut St.
Farthing, Gene W., Medical Arts Bldg.
Feller, C. E., 609 Cherry St.
Ferguson, John P., Jr., 1219 S. Clay
Ferrell, Thomas E., Jr., Professional Bldg.
Fessenden, Ersel M., 634 Kingsbury
Fitch, C. H. Max, 1711 Boonville
Focht, Ralph H., Strafford
Francis, William C., Medical Arts Bldg.
Freeman, Hal E., 609 Cherry St.
Fulbright, James H., 1033 E. Walnut
Gentry, Merritt L., 432 Medical Arts Bldg.
Glenn, Elmar E., 1643 E. Catalpa
Glynn, Robert, 500 Holland Bldg.
Good, James T., Holland Bldg.
Gorelick, David F., 111 Professional Bldg.
Gose, Don Ferrell, Professional Bldg.
Hall, Durward G., 500 Holland Bldg.
Hanan, Ernest B., 675 S. Kickapoo
Hansbro, Gerald L., 43rd Surgical Hospital, MA. APO 301, c/o P.M., San Francisco, Calif.
Hanss, Armand W., Medical Arts Bldg.
Harris, Thomas S., 1300 Josephine St., Denver, Colo.
H'Doubler, Francis T., 406 Professional Bldg.
H'Doubler, Francis T., Jr., 406 Professional Bldg.
Heimburger, Leroy F., Medical Arts Bldg.
Hogeboom, George W., 208 Professional Bldg.
Hoover, H. Lee, Jr., 208 Professional Bldg.
Horst, Otto C., Medical Arts Bldg.
Horton, James D., 406 Professional Bldg.
Huffman, Elston R., V. A. Hospital, Denver, Colo.
James, Joseph D., 304 Professional Bldg.
Johnson, Warford B., 304 Medical Arts Bldg.
Johnson, William F., 211 Professional Bldg.
Johnston, Joseph L., 1919 S. Jefferson
Klingner, George M., R. 9, Box 445
Knabb, Arthur D., 1630 N. Jefferson
Knabb, Harris, 1630 N. Jefferson
Knabb, Henry F., 1630 N. Jefferson
Knabb, Henry F., Jr., 1630 N. Jefferson
Knabb, Kenneth E., 1630 N. Jefferson
Langston, Walter R., 408 Professional Bldg.
Leidinger, Karl J., Republic
Lemmon, George B., 1101 E. Walnut St.
Lemmon, G. Bruce, Jr., 407 Professional Bldg.
Leslie, James F., 222½ E. Commercial
Lockhart, Charles E., 105 Professional Bldg.
Lowe, Horace A., 700 Medical Arts Bldg.
Lowe, Horace A., Jr., 342 Medical Arts Bldg.
Lurie, Harold H., 1425 Hart St.
Maddux, William P., 209 Professional Bldg.
Maher, Robert W., 226 Professional Bldg.
Marcus, Edward, Woodruff Bldg.
Marshall, Homer C., Professional Bldg.
Marshall, W. J., 305 Professional Bldg.
Meyer, Claude B., 410 McDaniel Bldg.
Morton, Paul C., 1508 E. Stanford
Musick, James D., Medical Arts Bldg.
Napper, Marvin L., Medical Arts Bldg.
O'Brien, James A., 256 N. Topeka Ave., Wichita, Kansas
Orr, Charles H., Ash Grove
Park, William I., Jr., 209 Professional Bldg.
Peterson, Stanley S., 500 Holland Bldg.
Pickens, E. Allen, 432 Medical Arts Bldg.
Plumlee, William C., 511 Holland Bldg.
Pope, Nathan K., 221½ E. Commercial St.
Powell, Edwin M., Professional Bldg.
Rainwater, E. H., 223 Professional Bldg.
Rigney, Levi M., S.S.Sta. Box 1428
Rosen, Max, Medical Arts Bldg.
Sartin, John M., Medical Arts Bldg.
Schwartz, Eugene J., 301 Professional Bldg.
Schweitzer, Fred C., Jr., Woodruff Bldg.
Sewell, Walter S., Professional Bldg.
Siceluff, Joseph G., 609 Cherry St.
Silsby, Don H., 326 Landers Bldg.
Silsby, Don James, 303 McDaniel Bldg.
Silsby, Harry D., 208 Professional Bldg.
Simpson, Emerson L., 1630 N. Jefferson
Smith, C. Souter, 513 Holland Bldg.
Snead, William H., Jr., 103 Professional Bldg.
Stewart, R. Wendell, 203 Professional Bldg.
Sundstrom, Frank D., 500 Holland Bldg.
Tarrasch, E. L., Woodruff Bldg.
Taylor, William E., Southwest Missouri State College
Thomasson, David D., 1630 N. Jefferson
Tillman, Walter W. Jr., 215 Professional Bldg.
Turner, Glenn O., 307 Professional Bldg.
Upshaw, Paul O., Medical Arts Bldg.
Vail, A. Denton, 407 Professional Bldg.
Vinywar, Robert, 700 Medical Arts Bldg.
Wakeman, Jasper N., 626 Woodruff Bldg.
Walsh, William T., P. O. Box 144, Kingwood, W. Va.
Webb, Leslie R.. 1254 E. Meadowmere

Webb, Leslie R., Jr., 401 Professional Bldg.
White, R. Ned, 205 Professional Bldg.
Williams, John W., 201 Professional Bldg.
Williams, John W., Jr., 710 Landers Bldg.
Williams, Robert F., 710 Landers Bldg.
Wise, Gordon F., 215 Professional Bldg.
Wood, William W., 1331 Fourth Ave., S. E., Rochester, Minn.
Wooldridge, W. E., 100 Professional Bldg.
Yancey, Daniel L., 500 Holland Bldg.

GRUNDY COUNTY

(Grand River Medical Society)

HARRISON COUNTY

(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Baggerly, Walter E., Montrose
Blackmore, Thomas A., Windsor
Douglas, Thomas H., Jr., R. 2, Box 78, Camarillo, Calif.
Hollingsworth, Ray S., Clinton
Hughes, Shelby B., Clinton
Jennings, Robert J., Windsor
Jordan, Ray B., Windsor
Smith, James O., Clinton
Thurber, Claude M., Windsor
Walker, George S., Clinton
Walker, Hugh B., Clinton
Wall, Harvey M., Windsor
Woltzen, Samuel W., Urich

HICKORY COUNTY

(Dallas-Hickory-Polk County Medical Society)

HOLT COUNTY MEDICAL SOCIETY

Hogan, Frank E., Mound City
Kearney, Elmer F., Oregon
Perry, David C., Mound City
Sweaney, Isaac F., Oregon

HOWARD COUNTY MEDICAL SOCIETY

Allen, William C., Glasgow
Bloom, W. A., Fayette
Dean, Francis D., Fayette
Gardner, Joseph W., Glasgow
Leech, Maurice P., Fayette
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette

HOWELL COUNTY

(South Central Counties Medical Society)

IRON COUNTY

(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY

(Kansas City)

Aaron, George A., 123½ W. Lexington, Independence
Adams, Noah, 818 Professional Bldg.
Adelman, Arthur, P. O. Box 202, Yachats, Oregon
Ahlefied, Charles B., 215 Pershing Rd.
Aisenstadt, E. Albert, 1204 W. 67th St.
Allebach, H. K., Research Hospital
Allen, Charles E., 712 Waldheim Bldg.
Allen, Charles H., First Natl. Bank Bldg., Independence
Allen, Robert E., 315 Nichols Road
Allen, Sylvia, 4635 Wyandotte St.
Allen, William B., 411 Alameda Rd.
Alsop, Webb S., Jr., 1017 Bryant Bldg.
Altomare, Edward P., 1030 E. Pacific
Altringer, Arthur N., 1622 Professional Bldg.
Anderson, A. Isadore, 723 W. 45th St.
Anderson, Raymond B., Plaza Time Bldg.
Anderson, Richard W., 21 W. 58th St.
Anderson, W. Connelly, 6416 Independence Ave.
Andrus, Bailey C., 233 Plaza Medical Bldg.
Arms, Arnold V., 4635 Wyandotte
Aschman, Theodore H., 174 Plaza Time Bldg.
Asel, Norman D., Plaza Time Bldg.
Asher, Arthur G., 1220 Professional Bldg.
Atcheson, Bellfield, 5215 Sunset Drive
Atwell, Floyd C., 226 Plaza Time Bldg.
Aull, John, 1306 Professional Bldg.
Backmann, Paul L., General Hospital No. 1
Baer, Alvin J., 1404 Bryant Bldg.
Baker, Philip J., 4000 Baltimore
Ball, James E., 1102 E. 47th St.
Ballard, Volney B., 209 Plaza Time Bldg.
Barelli, Pat A., 194 Plaza Time Bldg.
Barnett, Gordon P., 6333 Brookside Plaza
Barry, Gerald W., 3601a Troost Ave.
Barry, William B., 116 W. 47th St.
Baum, Frank E., 507 Professional Bldg.
Baumhardt, Edward E., 4635 Wyandotte
Bay, Merrill R., Blue Springs
Beatty, Arch J., 67 Bay State Road, Boston, Mass.
Becker, Richard R., 4000 Baltimore
Bee, James E., 3520 Broadway
Beil, J. Wallace, 1205 W. 59th St.
Belaval, Gustavo S., 2018 Chester, Kansas City, Kansas
Bell, William F., 18 E. 3rd St., Lee's Summit
Belot, Monti L., 1440 W. Lexington Ave., Independence
Bennett, James D., 409 E. 63rd St.
Bennett, Joseph S., 1533 Ash Ave., Independence
Benoit, Hector W., Jr., 618 Professional Bldg.
Berenson, Sheldon E., 427 E. 79th St.
Berger, Dan L., Plaza Time Bldg.
Bergmann, Victor H., 1120 Professional Bldg.
Bernreiter, Michael, 436 Professional Bldg.
Berry, Maxwell G., 315 Alameda Road
Biggs, Harry L., 63rd & Blue Ridge, Raytown
Bills, Marvin L., 236 Plaza Time Bldg.
Birenboim, Irvin M., General Hospital No. 1
Black, Donald R., 924 Professional Bldg.
Black, Eugene C., 1228 Professional Bldg.
Blumenschein, J. C., 203 S. Spring, Independence
Bohan, Peter T., 503 E. 44th St.
Bolin, N. Venay, 1418 Professional Bldg.
Bond, Marcus B., 314 Wirthman Bldg.
Boody, Robert J., Plaza Time Bldg.
Border, Charles T., 1701 Ruby Drive, Garland, Texas
Borenstine, Joseph, 121 W. 63rd St.
Boughnou, Harvey P., 315 Alameda Rd.
Bourke, Timothy S., 1207 Rialto Bldg.
Boutros, Amin, 416 Argyle Bldg.
Bowser, John F., Plaza Time Bldg.
Brams, Jack B., 330 Professional Bldg.
Brown, Adrian J., 4526 Paseo
Brown, Irwin S., 230 Plaza Time Bldg.
Brown, Robert S., 523 Decatur, Orange, Texas
Broyles, Glen H., 1232 Professional Bldg.
Brumm, Lawrence W., 508 Wirthman Bldg.
Bruner, Robert E., 912 Valentine Road
Brust, Carl H., 6114 Howe Drive, Mission, Kansas
Buckingham, William, 314 Professional Bldg.
Buckner, Robert C., Professional Bldg.
Budke, Harold A., 306 E. 12th St.
Buhler, Victor B., General Hospital No. 1
Bunting, Williston P., 1622 Professional Bldg.
Burns, Beryl I., General Hospital No. 1
Burns, Jonathan E., 530a S. George, Charles Town, W. Va.
Butcher, Robert W., General Hospital No. 1
Byers, Philip L., 4635 Wyandotte
Cain, Arthur S., Jr., 790 Riverside Dr., Apt. 3N, New York, N. Y.
Caldwell, John K., 1036 Argyle Bldg.
Calkins, William G., 1 W. 89 St.
Callaway, Luther M., R. 1, Center Motel, Clearwater, Fla.
Campbell, Frederick B., 1210 Professional Bldg.
Capell, Clarence S., 1135 Rialto Bldg.
Carbaugh, Glenn C., 2004 Bryant Bldg.
Carlson, Hjalmar E., 1316 Professional Bldg.
Carmichael, Francis A., Jr., 170 Plaza Time Bldg.
Carrier, Edson C., 315 Alameda Rd.
Casebolt, Buford T., General Hospital No. 1
Casebolt, Milton B., 4000 Baltimore
Casford, Ralph S., 315 Alameda Road
Castelaw, Rush E., 3731 Locust St.
Castles, John E., 1002 Argyle Bldg.
Cavaness, Ernest W., 1010 Neptune Dr. Leucadia, Calif.
Centner, Paul J., 1200 Professional Bldg.
Chambers, James Q., Jr., 1232 Professional Bldg.
Chapman, Arthur H., 7809 Wyoming
Chapman, Samuel B., 830 Argyle Bldg.
Chatman, Eugene P., 2202½ E. 18th St.
Cheeseman, William B., 530 Professional Bldg.
Clark, Harold B., Rialto Bldg.
Clark, Irving H., 5801 Kingslee Drive, Hickman Mills
Clasen, Arthur C., 1430 Professional Bldg.
Coburn, Donald F., 221 Plaza Time Bldg.
Cochrane, Joseph J., 200 Plaza Medical Bldg.
Cockerell, Sanford F., 11037 Winner Rd., Independence
Coffey, Ralph R., 1324 Professional Bldg.
Coffin, Theodore A., 915 Professional Bldg.
Cohen, Harry K., 318 Argyle Bldg.
Cohen, Hillard, Menorah Hospital
Colglazier, Mary C., 5100 E. 24th
Comboy, Lawrence J., 604 W. Maple Ave., Independence
Connell, Evan S., 1408 Commerce Bldg.
Conover, Charles C., Trinity Lutheran Hospital
Cooper, John H., 1230 Argyle Bldg.
Cortner, Mary C., 4625 Paseo
Counsell, Chester M., 708 W. 17th St.
Cowherd, Joseph B., 6247 Brookside
Cox, Kenneth E., 4635 Wyandotte
Cramer, Quentin, 1226 Rialto Bldg.
Culbertson, William F., 11217 Bristol St., Hickman Mills
Cummins, Walter F., 1612 Professional Bldg.
Curran, Edward J., 1805 Federal Reserve Bank Bldg.
Curran, Kevin E., 1805 Federal Reserve Bank Bldg.
Curran, Maurice D., 1805 Federal Reserve Bank Bldg.
Cutcliff, Daniel J., 1222 McGee
Dann, David S., 410 Professional Bldg.
Davis, Herbert V., 411 Alameda Road
Davis, Jack M., Raytown
Davis, John J., 610 Professional Bldg.
Davis, Kenneth A., 231 W. 47th St.
Davis, Robert C., 820 Professional Bldg.
DeMaria, Peter F., St. Joseph Hospital
DeMott, Jack D., 2625 W. Paseo
DeMotte, John A., 249 Plaza Medical Bldg.
Dannie, Charles C., 1524 Professional Bldg.
Deweese, Everett R., 1010 Rialto Bldg.
Dickson, Frank D., 4312 Mill Creek Parkway
Diveley, Rexford L., 4312 Mill Creek Parkway
Dixon, Otto J., 1617 Professional Bldg.
Dixon, Vewiser L., 2204½ E. 18th St.
Dlabal, Luke J., 1210 Ash Ave., Independence
Doane, William L., 713 Main St., Grandview
Dodge, Mark, 231 Plaza Time Bldg.
Dodge, Milton, 321 Argyle Bldg.
Dodson, William W., 1010 Professional Bldg.
Dorsch, Ervin H., 10912½ Winner Road, Independence
Downey, James W., 800 Argyle Bldg.
Drake, Roy F., 2414 Telephone Bldg.
Draney, Thomas E., 4526 Paseo
Draney, Thomas L., 6415 Main St.
Drisko, Robert M., 1500 Professional Bldg.
Drowns, Bruce V., 1524 Professional Bldg.
Duer, Mildred C., 310 W. 47th St.
Duncan, Ralph E., 529 Highland Ave., P. O. Box 2597
Duncan, William H., 1200 Professional Bldg.
Dwyer, Frank X., 231 W. 47th St.
Dwyer, Hugh L., 315 Alameda Road
Dye, Harold B., T.W.A. Medical Dept., 10 Richards Road
Edde, Clifford G., 500 Argyle Bldg.
Edmonds, Devilla D., 4800 E. 24th St.
Eldridge, Charles J., 409 E. 63rd St.
Elias, David J., 3514 Chestnut St.
Elliott, Benj. L., 1418 Professional Bldg.
Elliott, James R., 1216 Professional Bldg.
Elliott, Raymond G., 407 1st St., Coronado, Calif.
Elston, George B., 400 Argyle Bldg.
Engel, Lawrence P., 315 Alameda Road
Etzenhouser, Russell D., Jr., 317 W. Kansas St., Independence
Eubank, Dillard M., Raytown
Eubank, William R., 1404 Bryant Bldg.
Evans, E. John E., 321 Belt St., St. Louis
Farley, Claude C., 4526 Paseo
Farney, Jacob P., 6305 Brookside Place
Farnsworth, Jesse J., 730 Professional Bldg.
Feierabend, Frank L., 327 Argyle Bldg.
Feist, George V., 2400 Tomahawk Road
Ferguson, Donald S., 2012 E. 24th St.

Ferguson, Eugene H., 933 Professional Bldg.
Ferguson, James T., 410 Bryant Bldg.
Ferris, Carl R., 934 Argyle Bldg.
Findley, James W., 718 Shukert Bldg.
Fitzgerald, Robert H., 309 W. Kansas Ave., Independence
Flanders, Horace F., 522 Professional Bldg.
Flatley, John A., 33rd & Raytown Road, Raytown
Fleming, Royall B., 1433 E. 19th St.
Folck, William P., 10 Richard Road
Forman, Louis H., 4635 Wyandotte
Forsythe, Robert W., 170 Plaza Time Bldg.
Fowler, James W., 1630 Professional Bldg.
Fox, Charles R., 830 Argyle Bldg.
Frankl, George, 403 Argyle Bldg.
Fredeen, Robert C., Plaza Time Bldg.
Frick, John P., 814 Professional Bldg.
Friedman, Morris L., 414 Argyle Bldg.
Fuhrman, Donald Lee, 1524 Professional Bldg.
Gainey, Harold L., 4635 Wyandotte
Ganley, William C., 314 Argyle Bldg.
Gard, Raymond F., 604 W. Maple, Independence
Garrison, Roy F., Argyle Bldg.
Gaskins, John H., 1400 Professional Bldg.
Gempel, Paul A., 315 Nichols Road
Gentry, Enoch N., Jr., 2414 Telephone Bldg.
Geraughty, Edward, 302 Shukert Bldg.
Gestring, Hugh A., 1220 E. 31st St.
Getelson, Joseph, 1218 Rialto Bldg.
Gibson, David M., St. Luke's Hospital
Gilkey, Harry M., 1624 Professional Bldg.
Gilliland, Oliver S., 814 Professional Bldg.
Gillmor, Charles S., 1226 Rialto Bldg.
Ginsberg, A. Morris, 420 Professional Bldg.
Ginsberg, Norman A., 322 Professional Bldg.
Gist, William L., 108 E. 65th Terrace
Gist, William W., 1600 Professional Bldg.
Glasscock, Ernest L., 195 Plaza Time Bldg.
Goldman, Max, 1618 Professional Bldg.
Goldman, Stanley L., 2208 Bryant Bldg.
Goodman, Leroy, 235 Plaza Time Bldg.
Goodson, William H., Jr., 730 Professional Bldg.
Grabske, Charles F., 129 W. Lexington, Independence
Grabske, Charles F., Jr., 129 W. Lexington, Independence
Graham, James W., 518 Argyle Bldg.
Graham, Wallace H., 518 Argyle Bldg.
Grauerholz, James W., 3527 Broadway
Greaves, Eli A., 1002 Argyle Bldg.
Green, Jess D., Jr., 1765 So. Victor, Tulsa, Okla.
Green, John R., First Natl. Bank Bldg., Independence
Green, John Richard, 129 W. Lexington, Independence
Green, Stanley L., First Natl. Bank Bldg., Independence
Greene, W. Wallace, 1032 Professional Bldg.
Griffith, George W., 733 Rialto Bldg.
Griffith, John A., Jr., Plaza Medical Bldg.
Growdon, John A., 1324 Professional Bldg.
Guffey, Don Carlos, 717 Professional Bldg.
Gunn, Richard W., 6230 Truman Road
Haggen, Margaret E., 6228 Agnes St.
Haight, John M., 3401 E. 12th St.
Hale, Ralph, 4400 W. 62nd Terrace
Hall, James R., 6417 Willow Lane
Hall, Thomas B., 902 Professional Bldg.
Hallberg, John W., 231 West 47th St.
Halpersin, Phillip H., 409 Professional Bldg.
Hamel, Herbert A., 928 Argyle Bldg.
Hamilton, Hugh G., Plaza Time Bldg.
Hardacre, Ruth Anna, 3300 Charlotte
Harless, Morris S., 409 East 63rd St.
Harned, Bert W., 6600 Medical Sq., A.P.O. 862, c/o P.M., New York, N. Y.
Hart, William W., Rt. 1, Box 75, Decorah, Iowa
Hartwig, Frederick H., 701 E. 63rd St.
Hashinger, Edward H., 411 Alameda Road
Haynes, Lee, 820 Archibald
Haynes, Solon E., 1200 Professional Bldg.
Hazen, Robert M., 4050 A.S.U., U. S. Army Hospital, Box 4, Fort Sill, Okla.
Hearst, Allen L., 1100 Professional Bldg.
Heller, B. Marcus, 409 East 63rd St.
Helman, Richard G., 625 Professional Bldg.
Henry, Schubert D., 1115 Grand Ave.
Herbst, Frank, 330 West 45th Terrace
Herrman, George V., Plaza Time Bldg.
Hess, Paul D., 8423 High Drive
Hibbard, Blaine Z., 209 Plaza Time Bldg.
Hickerson, John C., First Natl. Bank Bldg., Independence
Hickerson, William H., First Natl. Bank Bldg., Independence
Higgins, Robert S., 1107 Bryant Bldg.
Hill, Jack H., Trinity Lutheran Hospital
Hill, Jesse N., 1428 Hedges Ave., Independence
Hines, Paul, 2625 W. Paseo
Hink, Frederick W., 10235 Independence Road
Hodgson, Frank H., 4301 Main St.
Hodgson, Robert B., 4301 Main St.
Hoeper, Samuel D., 6232 Troost St.
Hoffman, Jacob S., 330 Professional Bldg.
Hoffmann, R. Lee, 1019 Professional Bldg.
Hogan, Daniel F., 801½ W. 39th St.
Hogue, Frank S., 233 Plaza Medical Bldg.
Holbrook, Walter F., 3230 Wabash Ave.
Hollweg, Kenneth C., 612 Bryant Bldg.
Holman, H. Frank, General Hospital No. 1
Holton, Edward B., First Natl. Bank Bldg., Independence
Hook, Waller C., 510 Professional Bldg.
Howard, John C., Jr., 411 Alameda Road
Hoxie, George H., 2808 Hillegass Ave., Berkeley, Calif.
Hughes, Gerald E., 1107 Bryant Bldg.
Hungate, Carroll P., 934 Argyle Bldg.
Hunt, Claude J., 1612 Professional Bldg.
Hunt, Martin P., 1408 Waldheim Bldg.
Hurwitt, Frank, Pickwick Hotel
Ibach, Harold F., 1308 E. 49th St.
Ingham, Walton C., 320 West 47th St.
Irland, Robert D., Union Station Hospital
Irwig, Fred, 1610 Professional Bldg.
Jackson, William R., 1107 Bryant Bldg.
Jacob, Walter P., 701 E. 63rd St.
Jacobs, Morton, 6416 Verona Rd.
Jaime, Nicholas, 4050 Broadway
James, Otis E., Jr., 928 Argyle Bldg.
Janis, Lee D., 4949 Rockhill Road
Jansen, Robert, 101 E. 63rd St.
Jarvis, James A., 236 Plaza Time Bldg.
Jarvis, William J., 1019 Professional Bldg.
Jeffries, Robert C., 6315 Brookside Plaza
Jennett, Harry N., 2701 Forest Ave.
Jennett, James H., 424 Professional Bldg.
Johns, William C., General Hospital No. 1
Johnson, C. Laurence, 1316 Professional Bldg.
Johnson, Edgar W., 1130 Rialto Bldg.
Johnson, Edgar W., Jr., 286 Plaza Theatre Bldg.
Johnson, Paul A., 121 N. Chelsea
Johnson, Thomas M., 198 Balcony Bldg.
Johnson, William A., 2206½ E. 18th St.
Johnstone, Paul N., 1110 Bryant Bldg.
Jones, George H., 80th & Paseo Sts.
Jones, Kneeland P., 1108 Troost Ave.
Jones, Theodore R., 1107 Bryant Bldg.
Juarez-Reyna, Guillermo, 1032 Professional Bldg.
Justus, John B., 201 Plaza Medical Bldg.
Kantor, Julius M., 204 Argyle Bldg.
Kantor, Samuel, 1404 Bryant Bldg.
Katz, Milton, 310 Bryant Bldg.
Kaul, Philip G., Plaza Time Bldg.
Kealhofer, George C., 4050 Broadway
Keeler, James E., 4301 Main St.
Keith, Willis E., 204 Argyle Bldg.
Kelly, Eugene H., 402 Wabash Ave.
Keltner, Raymond O., Raytown
Kent, Bela Kaszas, 63rd & Holmes St.
Kent, Clifford F., 1306 Bryant Bldg.
Kerr, Russell W., St. Joseph Hospital
Ketcham, William M., 1408 Waldheim Bldg.
Ketron, Marvin B., 5933 Cherry St.
Kettner, Edward G., 820 Professional Bldg.
Kienberger, Paul A., 5246 St. John
Kiene, Richard H., 5835 High Drive
Kimball, Merritt H., 91 Janssen Place
King, Walter R., General Hospital No. 1
Kingsbury, Helen C., 6415 Sagamou Road
Kirkpatrick, Milton E., 22nd & McCoy
Kitchen, William M., 1010 Rialto Bldg.
Klein, Edward H., 200 Plaza Medical Bldg.
Klepinger, Dayton P., 500 Argyle Bldg.
Knight, John S., 1622 Professional Bldg.
Knight, Lyle B., 8 West 3rd St., Lee's Summit
Knoch, H. Kermit, 1400 Professional Bldg.
Knox, Andrew C., 703 Shukert Bldg.
Koehler, Charles A., 511 Wirthman Bldg.
Koenig, Frank J., 1300 Professional Bldg.
Kohn, Cecil M., 630 Professional Bldg.
Korth, William M., 612 Professional Bldg.
Kovitz, Louis, 6330 Granada Road, Mission, Kansas
Kraft, Jacob, 3744 Askew
Kranson, Seymour J., 1210 Ash Ave. Independence
Kyger, Fred B., 510 Professional Bldg.
Kyner, Thomas A., 214 Wirthman Bldg.
Lacy, N. Eugene, Plaza Time Bldg.
Laffoon, France L., Raytown
Lakaytis, Charles A., 2700 Tracy
Lally, James J., 1207 Rialto Bldg.
Lamar, Frederick C., 624 Professional Bldg.
Lamar, Robert F., 624 Professional Bldg.
Landis, George K., 1630 Professional Bldg.
Laning, J. Halcombe, 6205 Brookside
Lapi, Angelo, St. Mary's Hospital
Lapi, Ruth M., 2012 Stratford Road
Lapp, Harry C., 1314 Professional Bldg.
Lapp, John G., 1314 Professional Bldg.
Latham, Raymond W., Plaza Theatre Bldg.
Laurenzana, Frank P., 428 S. White St.
Layton, Ira C., Argyle Bldg.
Lee, Chester E., 174 Plaza Time Bldg.
Lee, George C., 1630 Professional Bldg.
Lehner, Richard L., 406 Bryant Bldg.
Leifer, William W., 505 Professional Bldg.
Leitch, Cecil G., 1010 Professional Bldg.
Leitz, Frank B., 6832 Locust St.
Lemoine, Albert N., Plaza Time Bldg.
Leonard, Ward H., 3515 Independence St., Tulsa, Okla.
Levey, Harry B., 200 Argyle Bldg.
Lewis, Revis C., 221 Plaza Time Bldg.
Lewis, William E., 4435 Harrison St.
Lichtor, Alexander, 1102 Grand Ave.
Lichtor, Joseph M., 1310 Bryant Bldg.
Lieberman, B. Albert, Jr., 1002 Professional Bldg.
Liersch, Joseph C., 815 E. Gregory Blvd.
Lilly, Terry E., 807 Argyle Bldg.
Lilly, Terry E., Jr., 2117 West 50th St.
Lindquist, Carl N., 106 W. 14th St.
Link, Vance E., 3909th Med. Sq., Greenham Commons, A.F.B., A.P.O. 167, New York, N. Y.
Linville, Howard E., Address Unknown
Lockwood, Ira H., 830 Argyle Bldg.
Loewy, Louise B., 2625 Paseo
Long, Robert S., 4800 E. 24th St.
Lowell, Paul, 10 E. 40th St.
Lowrey, Ford J., 733 Rialto Bldg.
Lundgren, Fred H., Jr., 9216 High Drive
Luppens, Albert F., 10020 Curtis Rd., R.F.D. 4, Hickman Mills
Lyddon, Harold R., Jr., Westbrook Bldg.
McAlester, Andrew W., Jr., 2003 Bryant Bldg.
McAlester, Andrew W., III, 2003 Bryant Bldg.
McCanse, Raymond A., 241 Plaza Time Bldg.
McCarthy, William F., 140a Lake Topawingo, Blue Springs
McClanahan, Robert C., 820 Professional Bldg.
McComas, Robert E., 2605 Walnut St.
McConchie, James E., First Natl. Bank Bldg., Independence
McCoy, Frederick J., 1416 Professional Bldg.
McCubbin, Clarence R., 400 Professional Bldg.
McCullough, Campbell C., Argyle Bldg.
McCunniff, William B., Argyle Bldg.
McDonald, Bruce P., 2604 Prospect Ave.
McDonnell, John F., Plaza Medical Bldg.
McFarland, M. D., Plaza Medical Bldg.
McGannon, Paul T., 4711 Central Ave.
McHale, Thomas C., 4620 Independence Ave.
McKee, Joseph W., 1332 Professional Bldg.
McLeod, John, 205 Plaza Theatre Bldg.
McMillan, Thomas E., 1019 Professional Bldg.
McPhee, William R., U.S.S. Onslow AVP-48, FPO, San Francisco, Calif.
McPherson, Owen P., 318 Professional Bldg.
McVay, James R., 856 West 62nd St.
McVay, James R., Jr., 814 Porter Bldg.
MacInnis, Florence E., 618 Professional Bldg.
Maclean, John A., 600 N. Canyon Blvd., Monrovia, Calif.
Major, Hermon S., 3100 Euclid Ave.
Mangels, Kenneth A., 129 W. Lexington, Independence
Marks, Mark M., 701 E. 63rd St.
Marsh, Alice, Kansas University Medical Center, Kansas City, Kansas
Marshall, Cameron F., 201 Plaza Theatre Bldg.
Marty, Loraine A., Lakeview Heights
Mathewson, Hugh S., 321 Ward Parkway

May, James W., 1016 Rialto Bldg.
Mayer, John H., Jr., 618 Professional Bldg.
Melgaard, S. Rose, 6831 Cherry St.
Meyer, Paul W., 4312 J. C. Nichols Parkway
Miles, George O., 233 Plaza Time Bldg.
Miller, Clinton L., 8 W. 3rd St., Lee's Summit
Miller, Gerald L., 730 Professional Bldg.
Miller, Wade H., 305 Professional Bldg.
Miller, Walter P., 800 Argyle Bldg.
Miller, Wilson H., 4620 Independence Ave.
Mitchell, Robert H., 410 Bryant Bldg.
Mixson, William C., 4635 Wyandotte Ave.
Monahan, Elmer P., 814 Argyle Bldg.
Montello, Samuel A., 248 Plaza Medical Bldg.
Montgomery, James G., 1332 Professional Bldg.
Mooney, Justin L., 2006 Bryant Bldg.
Mooney, Marcel L., 1420 Bryant Bldg.
Moore, Robert A., 106 W. 14th St.
Morest, F. Stanley, 1000 Professional Bldg.
Morgan, David B., 520 Professional Bldg.
Morley, Louise A., 1103 Armour Blvd.
Morrow, Raymond L., 424 Professional Bldg.
Moss, Paul, 1306 Bryant Bldg.
Mosser, Robert S., Independence Sanitarium, Independence
Mueller, Martin J., 934 Argyle Bldg.
Mueller, Ralph E., 4219 N. 33rd Place, Phoenix, Ariz.
Mullen, Leo M., 4443 Paseo
Multhauf, Cyril J., 1222 McGee St.
Mundy, William L., 420 Professional Bldg.
Murphy, Jerome P., 5224 Sycamore, Mission, Kansas
Murphy, Robert J., 4301 Main St.
Myers, John L., Ketchikan, Alaska
Myers, John S., 815 Shukert Bldg.
Myers, Ralph R., Address Unknown
Myers, Robert M., 1025 Rialto Bldg.
Myers, Wilson A., 815 Shukert Bldg.
Needels, Orval T., 7400 Wornell Road
Nelson, Charles S., 3626½ Independence Ave.
Nelson, Fred L., Research Hospital
Nickson, Charles E., Jr., 302 First Natl. Bank Bldg., Independence
Nicolay, Kenneth S., 4635 Wyandotte Ave.
Niedermeyer, Fred P., 5910 McGee Ave.
Nigro, Dominic M., 925 Argyle Bldg.
Nigro, E. Robert, 925 Argyle Bldg.
Nigro, Joseph A., 925 Argyle Bldg.
Noltensmeyer, Milton N., 3616 E. Roanoke Drive
Nunn, Pat Morris, 1401 Southwest Blvd., Kansas City, Kansas
O'Brien, Leo A., 1002 Argyle Bldg.
O'Brien, Raymond W., 286 Plaza Theatre Bldg.
O'Connell, Frank A., 329 Argyle Bldg.
O'Connell, P. J., 327 Argyle Bldg.
Ogilvie, John H., 224 Rialto Bldg.
Oglevie, Rial R., 522 Professional Bldg.
O'Hearne, John J., General Hospital No. 1
O'Malley, James F., 710 Professional Bldg.
O'Neil, James H., 424 Professional Bldg.
Osgood, George M., 915 Professional Bldg.
Overesch, Harry B., 600 Professional Bldg.
Owens, Graham J., 906 Grand Ave.
Owens, Hugh H., 1034 Rialto Bldg.
Owens, Michael J., 1034 Rialto Bldg.
Owens, Richard L., 1034 Rialto Bldg.
Owens, Robert H., 710 Professional Bldg.
Ozar, Milton B., University of Kansas Medical Center, Kansas City, Kan.
Padfield, Earl G., Medical Dept., Naval Training Center, San Diego, Calif.
Pakula, Sidney F., 251 Plaza Time Bldg.
Pallett, Harold A., 1132 Professional Bldg.
Parker, Elmer L., 3420 Troost Blvd.
Parker, Hubert M., 520 Argyle Bldg.
Parsons, Eugene O., 315 Nichols Road
Passman, Harold, 1116 Professional Bldg.
Patterson, John R., Plaza Time Bldg.
Pearson, Paul E., 1025 Rialto Bldg.
Peete, Don Carlos, 1500 Professional Bldg.
Pendleton, George F., 403 W. 68th St.
Perll, Maurice F., 733 Paseo Grande Road, Corona, Calif.
Perll, Rita D., 733 Paseo Grande Road, Corona, Calif.
Perry, Ralph, 4800 East 24th St.
Peterson, Carl M., 2462a Brooklyn Ave.
Peterson, Milton C., 400 Professional Bldg.
Peterson, Walter R., 2462a Brooklyn Ave.
Petry, Ezra L., Argyle Bldg.
Pfuetze, Edwin L., 1424 Professional Bldg.
Pickard, Nicholas S., 241 Plaza Time Bldg.
Pickens, Edgar E., 4826 Roanoke Parkway
Pierron, John B., 6516 Linden
Piper, Donald K., 6323 Hagerwood Road,
Pipkin, Garrett, 409 Argyle Bldg.
Pittam, Radford F., 830 Professional Bldg.
Platt, Paul C., 1203 Megee
Polk, George M., Route 1, Box 3, Lee's Summit
Pollock, Leo H., 1310 Bryant Bldg.
Poorman, Bert A., 2836 Prospect Ave.
Porter, Louis, 400 Professional Bldg.
Potter, Lee G., 724 Professional Bldg.
Powell, Benson M., 1601 Mac Vicar, Topeka, Kansas
Powers, John M., 3304 Linwood Ave.
Prentiss, Harry S., 900 Rialto Bldg.
Preston, Albert, Jr., 4635 Wyandotte Ave.
Price, Edward B., Jr., General Hospital No. 1
Printz, Joseph H., 1025 Professional Bldg.
Printz, Otto J., 229 Ward Parkway
Pugh, Richard G., 317 W. Kansas, Independence
Quer, Erich A., 1612 Professional Bldg.
Quistgard, Paul C., 6741 Prospect
Rader, Ada B., Martin City
Ramos, John F., Jr., 2462a Brooklyn Ave.
Rannie, Paul R., 709 So. Fuller St., Independence
Reinhardt, George R., 1332 Professional Bldg.
Reitz, Carl H., 404½ W. 75th St.
Remley, George C., 832 Argyle Bldg.
Rhoades, Arthur B., 2300 W. 51st Terrace, Kansas City, Kansas
Richardson, Marion W., 2526 Prospect Ave.
Riller, Lowell E., 530 Professional Bldg.
Rinkel, Herbert J., 2005 Bryant Bldg.
Rising, Jesse D., University of Kansas Medical Center, Kansas City, Kansas
Roberts, Harold M., 1530 Professional Bldg.
Roberts, Lacy M., General Hospital No. 1
Roberts, Sam E., 1110 Professional Bldg.
Robertson, James A., 708 W. 48th St.
Robinson, Arthur W., 4635 Wyandotte Ave.
Robinson, Donald E., 53 Kallman Dr., Newark, Del.
Robinson, Ernest Kip, 1228 Professional Bldg.
Robinson, G. Wilse, 2625 Paseo
Robinson, G. Wilse, Jr., 2625 Paseo
Robinson, William J., 1828 Walnut St.
Robison, James T., Jr., 411 Nichols Road
Rodgers, Samuel U., 2462a Brooklyn Ave.
Rose, Charles W., 103 N. Elmwood
Roth, Alexander, 208 Plaza Time Bldg.
Roy, Gustave A., Marine Corps Air Facility, Santa Ana, Calif.
Rubin, Sidney, 410 Professional Bldg.
Rubnitz, Leon H., 400 Professional Bldg.
Rufe, Jack R., 2003 Bryant Bldg.
Russell, Robert K., 63rd & Blue Ridge Rd., Raytown
Saferstein, A. Lester, 6859 Cherry
Saladino, Anthony, 1040 Argyle Bldg.
Samuelson, Edward A., 2603 E. 31st St.
Sanders, Harmon U., Jr., 404 First Natl. Bank Bldg., Independence
Sanders, William F., Professional Bldg.
Saper, Philip, 3 E. 3rd St., Lee's Summit
Saunders, Everett L., 411 First Natl. Bank Bldg.
Sawyers, Gordon E., 830 Argyle Bldg.
Scarpellino, Louis A., 36 E. 52nd St.
Schaerrer, Hans, 314 Shukert Bldg.
Schaerrer, William C., 4635 Wyandotte St.
Schaffer, Richard C., St. Mary's Hospital
Schauffler, Robert M., 518 W. 10th St.
Schiffmacher, Jack E., 700 Professional Bldg.
Schorer, Edwin H., 1910 W. 56th St.
Schultz, Loraine E., 1025 N. 22nd St., Kansas City, Kansas
Schut, Carl B., 320 W. 47th St.
Schut, Richard B., Plaza Time Bldg.
Seely, Clark W., Plaza Time Bldg.
Sewell, Minor F., 1722 W. 39th St.
Shapiro, Lazare M., 628 Professional Bldg.
Shelden, Russell D., 400 Professional Bldg.
Shelden, John, Vineyard Park Hospital
Shelden, John G., 604 Commerce Bank Bldg.
Shifrin, Alexander, 6709 Locust St.
Shofstall, Charles K., 300 West 47th St.
Shofstall, William H., 300 West 47th St.
Shook, Lester D., 830 Argyle Bldg.
Shuey, Herbert H., 3903 Brooklyn Ave.
Shumate, David L., 500 Argyle Bldg.
Shypper, Moses J., 4738 Oak St.
Simon, Sanford, Professional Bldg.
Simpson, Morris B., 1408 Professional Bldg.
Sinclair, Alexander B., 4711 Central St.
Singleton, J. Milton, 315 Alameda Road
Skinner, John O., 1402 Bryant Bldg.
Skinner, John T., 1402 Bryant Bldg.
Skoog, Andrew L., 919 Rialto Bldg.
Slentz, Edwin L., 215 Plaza Medical Bldg.
Slentz, William A., Plaza Medical Bldg.
Slusher, Ernest W., 806 Rialto Bldg.
Small, Walter L., Hyde Park Hotel
Smith, Arthur B., 830 Argyle Bldg.
Smith, Ira T., 1019 Professional Bldg.
Sneid, Philip, 1828 Walnut St.
Snider, Samuel H., 221 Plaza Medical Bldg.
Soderberg, N. B., Brook Army Medical Center, San Antonio, Texas
Sophian, Abraham, 1405 Bryant Bldg.
Spafford, Allen L., 1414 Professional Bldg.
Stacey, Wallace R., 319 W. Kansas Ave., Independence
Staggs, William A., 822 Argyle Bldg.
Staley, Harry R., 520 Bryant Bldg.
Statland, Harry, 1406 Bryant Bldg.
Statland, Morris, Address Unknown
Steffen, Lawrence F., 1220 Professional Bldg.
Stewart, Robert H., 2203 E. 68th St.
Stockton, Raymond W., 286 Plaza Theatre Bldg.
Stockwell, A. Lloyd, 600 Professional Bldg.
Stratemeier, Edward H., General Hospital No. 1
Summers, Caldwell B., 222 Plaza Theatre Bldg.
Swisher, Robert C., 5509 Brookside
Switzer, Clyde, R. R. 2, Grandview
Tabris, Julius A., 411 Nichols Road
Tamblyn, Claire L., 7613 Rainbow Drive
Tarson, Solomon S., 3221 Troost
Tasker, Charles B., 730 Professional Bldg.
Teall, Raymond E., 1016 Professional Bldg.
Tesson, James A., 907 Rialto Bldg.
Theel, Otto W., Jr., 123 E. 39th St.
Thiele, George H., 6526 High Drive
Thiessen, Edward H., 411 Alameda Road
Thomason, Henry E., 1132 Professional Bldg.
Thorn, Druery R., 1107 Bryant Bldg.
Treharne, Frank E., 301 W. Kansas Ave., Independence
Trippe, Harrison C., 1014 Argyle Bldg.
Trowbridge, Barnard C., 415 East 63rd St.
Trowbridge, Ellsworth H., 1905 Bryant Bldg.
Trowbridge, Ellsworth H., Jr., 1905 Bryant Bldg.
Turner, Percy C., 1433 E. 19th St.
Tuthill, Herbert, 1211 Rialto Bldg.
Tuttle, Floyd W., Blue Springs
Twin, Edward J., Argyle Bldg.
Twyman, Elmer D., 750 W. 47th St.
Twyman, Richard A., 1314 Professional Bldg.
Underwood, Dick H., 1107 Bryant Bldg.
Underwood, Harry A., 4712½ E. 24th St.
Underwood, Johnson, Jr., 1600 Professional Bldg.
Underwood, Ross H., 1107 Bryant Bldg.
Unger, Harold, 1300 Bryant Bldg.
Upsher, Albert E., Blue Springs
Valentine, Herbert S., 1124 Professional Bldg.
VanBiber, James T., 317 W. Kansas Ave., Independence
Van Buskirk, William C., 612 Professional Bldg.
VanDel, Dwight T., 909 Professional Bldg.
Vilmer, Charles, 1216 Professional Bldg.
Vincent, Jack C., 205 Argyle Bldg.
Virden, C. Edgar, 700 Professional Bldg.
Virden, Herbert H., 700 Professional Bldg.
Wade, Frederick E., 1012 Professional Bldg.
Wakefield, Franklin, Jr., 2004 Bryant Bldg.
Walker, James C., 318 Professional Bldg.
Walker, John W., 830 Argyle Bldg.
Wall, Arthur H., 153 Santa Anita, Sierra Madre, Calif.
Wall, Harry C., 420 Professional Bldg.
Wallace, Frank B., Rialto Bldg.
Walthall, Damon O., 315 Alameda Road
Ward, Robert L., 3626 Independence Ave.
Watson, Ethel, 403 First Natl. Bank Bldg., Independence
Waxman, David, 4802 Prospect Ave.
Waxman, Jane Z., 4802 Prospect Ave.
Weaver, John L., General Hospital No. 1
Webster, Joseph G., 1400 Professional Bldg.

Weiford, Edward C., 320 West 47th St.
Welker, Joseph E., 834 Professional Bldg.
Weltscheff, Christo A., 510 Professional Bldg.
Werner, Franklin C., 522 Professional Bldg.
Wheeler, John H., 411 Alameda Road
White, Charles H., 4125 Brookridge, Mission, Kansas
White, Edwin C., 1032 Professional Bldg.
White, George A., 729 Shukert Bldg.
White, Stoughton F., 710 Professional Bldg.
Whiteman, John R., 6314 Brookside Plaza
Whitman, Doyle C., 1003 Sharp Bldg.
Wien, Irving A., 321 Argyle Bldg.
Wilhelm, Warren F., 107 W. Linwood
Wilkinson, Everett A., 1332 Professional Bldg.
Williams, Delon A., 806 Professional Bldg.
Williams, Joseph C., Jr., 830 Professional Bldg.
Williams, Luke E., 2201 E. 27th St.
Williams, Robert A., 5400 St. John Ave.
Williams, Vincent T., 836 Argyle Bldg.
Williams, William R., Jr., Address Unknown
Willits, Lyle G., 1515 Professional Bldg.
Willoughby, Jean B., 1032 Professional Bldg.
Wilson, Clifford C., 217 Plaza Time Bldg.
Wilson, Hester J., 233 Plaza Time Bldg.
Winkelman, Esther B., 7449 Broadway
Winston, Bernard H., 324 Professional Bldg.
Wise, George W., 204 Plaza Time Bldg.
Withers, Orval R., 1418 Bryant Bldg.
Wolf, Jack W., 409 East 63rd St.
Wood, Laurence E., Plaza Time Bldg.
Woods, Harold V., 121½ W. Lexington, Independence
Wortmann, Robert F., 1512 Professional Bldg.
Wright, R. Paul, 1324 Professional Bldg.
Wu, William Q., 63rd & Holmes
Yazel, Herman E., 733 Rialto Bldg.
Young, James E., 4635 Wyandotte
Young, Jesse W., 1401 Southwest Blvd., Kansas City, Kansas
Zellermayer, Jacob, 609 Professional Bldg.
Ziegler, Allen M., 320 W. 47th St.
Zoglin, Nathan M., 927 Argyle Bldg.
Zuber, Harold V., 600 Professional Bldg.

JASPER COUNTY MEDICAL SOCIETY

(Joplin)

Alberty, Omer L., Carl Junction
Birsner, Frank H., Carthage
Black, Mervin H,, 516 Frisco Bldg.
Blanke, Otto T., 725 Frisco Bldg.
Blankenship, George W., Anderson
Bragdon, George H., Reeds
Burch, John E., 804 Frisco Bldg.
Butterworth, Nelson S., 910 Kensington Road
Byrd, Homer E., Carthage
Coates, Charles C., Frisco Bldg.
Craig, Irwin T., 829 Frisco Bldg.
Craig, William E., Address Unknown
Crawford, Archie L., 631 Frisco Bldg.
Crispell, Lawrence S., 6th & Pearl Ave.
Curl, Howard, 622 Frisco Bldg.
DeTar, Burleigh E., 410 Jackson St.
DeTar, Burleigh E., Jr., 410 Jackson St.
Douglas, John W., 210 W. 32nd St.
Douglass, Jesse E., Webb City
Eliscu, Juliette, Frisco Bldg.
Ferguson, Ralph L., Frisco Bldg.
Ferguson, Robert M., Webb City
Grantham, Samuel A., Jr., 420 Byers
Hall, Marvin F., 622 Frisco Bldg.
Hamilton, Eugene H., 325 Frisco Bldg.
Holtzman, Samuel, 811 Frisco Bldg.
Hornback, Edward R., 215 Frisco Bldg.
Howard, Walter M., 301 Frisco Bldg.
Hurst, W. W., Joplin National Bank Bldg.
Isbell, Charles H., Carthage
James, Edward D., 826 Frisco Bldg.
James, Robert M., 504 Jackson
Jeans, Virgil, 511 Joplin National Bank Bldg.
Kenney, Verna E., Miners Bank Bldg.
Kiehl, Katharine, DeTar Clinic
Kirschman, Robert E., 215 Frisco Bldg.
Koehler, John W., Frisco Bldg.
Kuhn, John R., Jr., 321 Frisco Bldg.
Laney, Ronald L., Webb City
McIntire, Emery J., Carthage
McNew, William T., Carthage
McPike, Lloyd H., 607 Frisco Bldg.
Mack, Mary L., 602 N. Byers
Maddox, John D., 528 Pearl St.
Meinhardt, Ralph E., Box 572, Harlingen A.F.B., Harlingen, Texas
Mitchell, Ernest, Goodman
Myers, Roy E., Frisco Bldg.
Neff, Robert L., 423 N. Pearl St.
Old, Jacob W., Jr., 4101 Brandt, Houston, Texas
Paddock, Charles S., Frisco Bldg.
Papp, Sandor D., Frisco Bldg.
Patterson, Grover S., Carthage
Poor, Carl W., Neosho
Post, Winfred L., 617 Joplin St.
Powers, Everett, Carthage
Putnam, John A., Carthage
Reid, Charles T., 614 Hampton Place
Rosenthal, Frances E., 724 Frisco Bldg.
Saylor, Robert K., 2801 E. 12th St.
Schoeberl, C. B., Address Unknown
Schulte, G. A., 622½ Main St.
Scorse, Sidney W., Frisco Bldg.
Simmons, Leroy, Sarcoxie
Sims, John L., 605 Frisco Bldg.
Smith, Roland T., 821 Frisco Bldg.
Smith, William R., Carthage
Stormont, Riley M., Webb City
Sutphin, John B., 631 Frisco Bldg.
Van Urk, Jules B., Carthage
Walker, Paul W., Frisco Bldg.
Webster, Roger W., 369 Crest Drive, San Jose, Calif.
Whitten, M. Foster, Carthage
Wieman, Harry K., 718 Frisco Bldg.
Wilson, Alice H., 1923 Sergeant
Wood, George H., Carthage
Wright, George W., Webb City
York, William B., Sarcoxie

JEFFERSON COUNTY MEDICAL SOCIETY

Arbuckle, Millard F., 505 Humboldt Bldg., St. Louis
Bolgar, Bartholomew, Festus
Commerford, James J., Crystal City
Dobbins, Thomas, K.O.P. Staff Area, La Porte, Ind.
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Edwards, T. Burton, Cedar Hill
Edwards, Waldo B., Cedar Hill
Fallet, Chas. E., DeSoto
McKinstry, Karl V., DeSoto
Reich, Oliver F., Kimmswick
Rice, Carl E., Hillsboro
Rutledge, John F., Crystal City
Schulein, Vernon E., 13931 Highwood Drive, San Jose, Calif.
Senn, Emmett J., Herculaneum
Yoskit, Harry, Festus

JOHNSON COUNTY MEDICAL SOCIETY

Cooper, R. Lee, Warrensburg
Damron, Oscar H., Warrensburg
Grove, Gulph W., Knob Noster
Harkness, Harry, Warrensburg
Holmes, David R., Warrensburg
Johnson, Charles S., Warrensburg
Lederer, Charles M., Warrensburg
Maxson, T. Reed, Warrensburg
Parker, Harry F., Box 606, Haines City, Fla.
Patterson, William R., Warrensburg
Rawlins, Kelly, Holden
Thompson, William G., Holden

KNOX COUNTY

(North Central Counties Medical Society)

LACLEDE COUNTY MEDICAL SOCIETY

Carlton, Charles E., Stoutland
Carrington, Howard W., Lebanon
Casey, Shederick A., Lebanon
Fisher, George E., Lebanon
Froelich, Rae W., Lebanon
Harrell, Roosevelt E., Lebanon
Hope, James L., Lebanon
Hurst, Ben B., Lebanon
Jenkins, Paul A., Lebanon
Johnson, Ferrell H., Lebanon
Lindsay, John W., Conway
Peckham, John W., 327 Baker St., St. Louis
Summers, Jacob H., Lebanon

LAFAYETTE-RAY COUNTY MEDICAL SOCIETY

Best, Robert, Higginsville
Brady, Hugh S., Concordia
Brasher, Ben H., Lexington
Buehrer, Cletus E., Lawson
Bumgarner, James E., 5201 W. 72nd St., Prairie Village, Kansas
Cope, Joseph S., Lexington
Davault, George K., Richmond
Fulkerson, Wilbur E., Higginsville
Goldberg, Isadore E., Braymer
Greene, Luther D., Richmond
Johnson, M. C., Richmond
Kelling, Douglas G., Waverly
Kelling, George A., Waverly
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Jr., Higginsville
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Martin, Wilfred E., Odessa
Masterson, Melvin L., 2406 Alexander, Waco, Texas
Nisbet, Eliga B., Odessa
Payne, Bryan T., Lexington
Riley, Ralph W., Lexington
Ryland, Caius T., Lexington
Schooley, Renick C., Odessa
Shouse, Edwin, Lawson
Ward, Joe, Lexington
Williams, John W., Oak Grove
Willis, John B., Mayview

LAWRENCE COUNTY

(Ozarks Medical Society)

LEWIS-CLARK-SCOTLAND COUNTIES MEDICAL SOCIETY

Bridges, James R., Kahoka
Davis, Landis Y., Canton
Ellery, William L., LaGrange
Jennings, Perry W., Canton

LINCOLN-ST. CHARLES COUNTY MEDICAL SOCIETY

(St. Charles)

Barnard, Charles A., Portage des Sioux
Behan, Lawrence G., 3416 St. Johns Dr., Dallas, Texas
Budke, Robert J., 126 Main St.
Canty, Eugene J., R. R. 1
Clay, Calvin, 106 Washington St.
Creech, Joseph C., Troy
Crider, Russell J., St. Charles Hotel Bldg.
Damron, Edward O., Elsberry
Greene, Maurice L., 114 N. Main St.
Hicks, Edward A., Troy
Jenkins, Joseph M., 117 S. Main St.
Kister, George E., 818 N. Second St.
Klink, Lon B., 313A Fenwick Road, Fort Monroe, Va.
Krieger, John L., 1219 Louisville St., St. Louis
Licon, Francisco, 3908 Hueco, El Paso, Texas
McIntire, Landon R., 117 S. Main St.
McMurray, Herbert C., Wentzville
Muschany, Norman K., Troy
Neubeiser, Ben L., 206 Washington St.
Nichols, Samuel I., Address Unknown
Penn, Robert M., Silex
Poggemeier, William H., Jr., 200 Clay St.
Randall, Don Q., 207 N. 5th St.
Reeves, Gerald A., 207 N. 5th St.
Rugh, Walter B., 207 N. 5th St.
Schneider, Vincent A., 207 N. 5th St.
Schulz, Arthur P. E., 16 Jefferson St.
Towers, Orville W., 114 N. Main St.

LINN COUNTY

(Grand River Medical Society)

LIVINGSTON COUNTY

(Grand River Medical Society)

MCDONALD COUNTY

(Unorganized)

MACON COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MADISON COUNTY

(Mineral Area County Medical Society)

MARIES COUNTY

(Phelps-Crawford-Dent-Pulaski-Maries County Medical Society)

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY

(Hannibal)

Archer, Perry C., Shelbyville
Birney, William P., 1003 Broadway
Brown, John E., Perry
Burns, Francis R., 226 Broadway
Canella, John M., 707 Broadway

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Greene, Harry L., Holmes Bldg.
Hamlin, Wyeth, Palmyra
Hardesty, Joel W., Holmes Bldg.
Hoerchler, T. J., Shelbina
Hornback, George A., 500 Broadway
Kibbe, John H., Monroe City
Landau, Daniel B., 228 Broadway
Lanning, Robert J., 228 Broadway
Levine, Ervan L., Vandalia
Lucke, Eugene M., Court House
Malley, John A., 1436 N. 5th St., Quincy, Ill.
Murphy, Bernard L., 200 Crescent Drive
Norton, Harry B., 110 N. 6th St.
Reichman, John J., 1001 Broadway
Roller, Merrill J., 228 Broadway
Smith, Ulysses S., Trust Bldg.
Smith, William J., 507 Hannibal Trust Bldg.
Strong, Richard M., 115 N. 5th St.
Sultzman, Francis E., 115 N. 5th St.
Walterschied, John H., 606 Mark Twain
Well, J. W., Palmyra

MERCER COUNTY

(Grand River Medical Society)

MILLER COUNTY MEDICAL SOCIETY

Allee, Warren L., Eldon
Buehler, Carl T., Jr., Eldon
Shelton, Edward O., Eldon

MINERAL AREA COUNTY MEDICAL SOCIETY

(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Charles H., Flat River
Bond, Franco G., Flat River
Bugg, Andrew F., Ellington
Bull, Ben M., Ironton
Carleton, Charles E., Jr., Farmington
Clapsaddle, Clare J., Ste. Genevieve
Cresswell, George F., Potosi
Crouch, F. Richard, Farmington
Evans, Albert L., Bonne Terre
Farrar, C. B., Flat River
Foster, Jack L., Desloge
Gaebe, Harold C., Desloge
Gale, Frank W., Bismarck
Gay, George, Ironton
Grossman, Marvin, Fredericktown
Harland, R. E., Ironton
Haw, Marvin T., Jr., St. Elizabeth Hospital, Lafayette, Ind.
Hoctor, Emmett F., Farmington
Hunt, John W., Jr., Leadwood
Jones, Paul L., Flat River
Lanning, Richard C., Ste. Genevieve
Lanning, Robert W., Ste. Genevieve
Martin, James H., Ironton
Michaelis, B. A., Fredericktown
Mullen, Jack, Bonne Terre
Pyrtle, James R., Centerville
Roebber, Harry M., Bonne Terre
Roesler, Paul J., 4600th Infirmary U.S.A.F., A.F.B., Colorado Springs, Colo.
Sexauer, Arthur E., Ste. Genevieve
Slaughter, Shelby C., Fredericktown
Taylor, Van Wm., Bonne Terre
Watkins, George L., Farmington
Watkins, George L., Jr., Farmington

MISSISSIPPI COUNTY

(Semo County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

Burke, John P., Jr., California
Fulks, Richard B., California
Gallagher, Lionel M., California
Kibbe, Edgar A., California
Latham, Kenyon S., California
Tarvydas, Francis, 1907 Telegraph Road, St. Louis

MONROE COUNTY

(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City
Byland, Samuel J., Wellsville
Helm, James O., New Florence
Hirsch, Albert, Middletown

MORGAN COUNTY MEDICAL SOCIETY

Gunn, Aubrey J., Versailles
Gunn, Jack, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. Loren, Versailles

NEW MADRID COUNTY

(Semo County Medical Society)

NEWTON COUNTY MEDICAL SOCIETY

Bowman, Melvin C., Neosho
Cardwell, Clarence, Stella
Carter, James R., Neosho
Davis, Paul C., Neosho
Duemler, Thomas B., Seneca
Lamson, Roy C., Neosho
Lentz, Harold C., Neosho
Maness, Charles E., Neosho
Reynolds, James R., Neosho
Rolens, Louis E., Granby
Taylor, Leo T., Neosho
Whitehead, Frank F., Neosho

NODAWAY-ATCHISON-GENTRY-WORTH COUNTIES MEDICAL SOCIETY

Bare, Edward F., Tarkio
Bauman, Henry C., Maryville
Bell, Charles T., Maryville
Blacklock, David E., King City
Bloomer, Joseph A., Maryville
Byland, Benjamin F., Maryville
Carlin, Albert L., Stanberry
Carpenter, Wallace, Rock Port
Coffey, James L., Fairfax
Cossins, Carlos E., State Hospital No. 2, St. Joseph
Dean, Leslie E., Maryville
Dunshee, Robert E., Maryville
Humberd, Charles D., Barnard
Imes, Elvin D., Maryville
Jackson, William R., Maryville
Kadull, Paul J., Conception Junction
Kirk, Charlie W., Hopkins
Matteson, Frank B., Grant City
Musgrave, Paul W., Address Unknown
Niedermeyer, Edward L., Tarkio
Rose, Frank H., Albany
Ross, Pren J., Grant City
Settle, Emmett B., Rockport
Wempe, G. Raymond, Maryville

NORTH CENTRAL COUNTIES MEDICAL SOCIETY

(Adair-Schuyler-Knox-Sullivan-Putnam)

Cramb, Arthur B., Spofford, N. H.
English, Milton T., Jr., Kirksville
Freeman, Spencer L., Kirksville
Gerwig, Henry E., Downing
Hart, Pearl V., Coatsville
Henry, Clifford E., Kirksville
Holman, Jurney H., Unionville
Hudson, G. R., Kirksville
Humphrey, Henry M., Brashear
Jones, John B., Kirksville
Luman, Frank E., Edina
Miltenberger, Val E., Kirksville
Montgomery, John S., Milan
Nulton, Ida May, Lancaster
Rosenthal, Louis M., Kirksville
Stickler, Ralph O., Kirksville
Sullivan, William J., V. A. Hospital, Davis Park, Providence, R. I.
Wimp, J. J., Kirksville

OREGON COUNTY

(South Central Counties Medical Society)

OSAGE COUNTY

(Unorganized)

OZARK COUNTY

(South Central Counties Medical Society)

OZARKS COUNTY MEDICAL SOCIETY

(Barry-Lawrence-Stone-Christian-Taney)

Aubin, Francis W., Branson
Brasher, Charles A., Mt. Vernon
Bunten, Joseph C., Branson
Burney, Wallace S., Miller
Capetti, Alex P., Aurora
Coffman, Esther E. L., 4139a Connecticut St., St. Louis
Cohnberg, Rosellen E., Monett
Cottrell, Wilson P., Reeds Spring
Cowan, R. D., Aurora
Donley, Robert R., Monett
Edwards, Francis L., Monett
Eller, Byron H., 430 Pitsanuloke Road, Bangkok, Thailand
Evans, Harry T., Branson
Ferguson, Lewis H., Monett
Ferguson, L. H., Jr., Vet. Admin. Hospital, Alexandria, La.
Glover, Kenneth, Mt. Vernon
Graves, Arthur J., Mt. Vernon
Hellweg, Charles E., Mt. Vernon
Holmes, Lemuel I., Miller
Holmes, Prince A., Mt. Vernon
Imes, Clifford H., Loma Linda, Calif.
Kerr, Frank T., Monett
Knowles, Harry P., L.B. 56, Rockaway Beach
McCallum, A. J. C., Aurora
Magness, William C., Branson
Maples, Floyd H., Mt. Vernon
Mickel, Arthur A., Cassville
Moennighoff, Fritz J., Monett
Newman, Mary Jane, Cassville
Ramsey, Ora W., Marionville
Robertson, Robert C., 403 River Rd., Fair Haven, N. J.
Roper, Stanley D., Ozark
Russell, James M., Monett
Shumate, L. St. Clair, Reeds Spring
Spears, Charles A., Pierce City
Stokes, Julius B., Excelsior Springs
Threadgill, Jesse M., Forsyth
Wommack, Fred L., Crane

PEMISCOT COUNTY MEDICAL SOCIETY

Aquino, Philip J., Caruthersville
Beecher, Sheldon B., Caruthersville
Brown, Charles W., Masonic Home, 5351 Delmar Blvd., St. Louis
Cain, Charles F., Caruthersville
Castles, Charles C., 3237 Acacia, Lemon Grove, Calif.
Chapman, J. R., Steele
Cook, O. W., Caruthersville
Cooke, Francis W., Caruthersville
Cooper, Lawrence E., 2105 Hanton, Ft. Myers, Fla.
Denton, Levi D., Hayti
Hensley, Daniel R., Wardell
Kaiser, Clarence D., Hayti
Lamb, Woodrow M., Caruthersville
Limbaugh, Walter R., Hayti
McCoy, Warren R., Caruthersville
McKaskle, Clarence W., Caruthersville
Morris, Clyde L., Caruthersville
Phipps, George W., Caruthersville
Ricketson, George M., Hayti
Shirey, Arnold G., Hayti
Taylor, Edward L., Steele

PERRY COUNTY MEDICAL SOCIETY

Bailey, William H., Perryville
Bredall, Jerome J., Perryville
Carron, Oscar A., Perryville
Feltz, L. W., Perryville
Fischer, Theodore, Altenburg
Grayson, Richard R., Perryville
Legner, Stanley G., Perryville
Lutkewitte, Joseph F., Naval Ordnance Plant, Macon, Ga.
Miller, Oliver J., Route 1, Cape Girardeau
Quintana, Manuel M., Perryville
Riley, Fred P., Perryville
Utterman, William F., Perryville

PETTIS COUNTY MEDICAL SOCIETY

(Sedalia)

Beckemeyer, William A., 120 W. 5th St.
Bess, William E., 210½ S. Ohio St.
Boger, James W., 120 W. 5th St.
Brady, Charles H., 205 Ilgenfritz Bldg.
Campbell, Albert J., 312½ S. Ohio St.
Cannady, J. E., 312½ S. Ohio St.
Carlisle, John B., 314 S. Ohio St.
Dyer, David P., 301 Sedalia Trust Bldg.
Edwards, D. R., 107½ S. Ohio St.
Ewert, J. O., 412½ S. Ohio St.
Gonser, Karl B., 101 S. Ohio St.
Hite, Henry A., Green Ridge
Hopkins, Thomas J., Fifth & Ohio
Lamy, John E., 509 W. Broadway
Long, Frank B., 219½ S. Ohio St.
Lowe, Alvin L., 418½ S. Ohio St.
Maddox, Albert R., 116½ West Main St.
Monroe, Alfred E., 644 E. 70th St., Kansas City
Murray, John W., 1226 Jackson Blvd., Houston, Texas
Osborne, Charles D., 118 W. 3rd St.
Parkhurst, Charles L., Houstonia
Proctor, Donald C., 418½ S. Ohio St.
Rhodes, Euhlan L., 717 W. 6th St.
Rodeman, John M., 219½ S. Ohio St.
Siegel, Carl D., 1216 W. 18th St.

Siegel, Peter V., Smithton
Snavely, Edmund C., 500½ S. Ohio St.
Stauffacher, C. Gordon, 101½ S. Ohio St.
Trader, Charles B., 1717 W. 3rd St.
Walker, William E., La Monte
Walter, Archie L., 120 W. 5th St.

PHELPS-CRAWFORD-DENT-PULASKI-MARIES COUNTIES MEDICAL SOCIETY

Bass, B. J., Salem
Breuer, Robert E., Newburg
Butts, James D., St. James
Campbell, John G., Steelville
Crosby, Alice S., Salem
Davis, Harry H., Rolla
Doubek, John C., Jr., 1233 Laney Del Lane, Kirkwood
Drake, Avery A., Rolla
Elders, Frank A., Jr., Cuba
Everist, Guy V., 3562 Addison St., San Diego, Calif.
Feind, Earl E., Rolla
Giem, Ross N., Rolla
Grosskreutz, Joseph A., St. James
Hammler, Christiana V., St. James
Hart, Martin M., Salem
Herzog, Gustav G. A., Cuba
Hughes, Edgar O., Dixon
Hunt, Lloyd H., Salem
Irwin, William F., Leasburg
Kozal, Francis L., Belle
Lytle, William R., Rolla
McDonough, Robert C., St. James
Miller, Clyde S., Waynesville
Myers, James M., Rolla
Russell, Barbara E., Rolla
Scott, Elijah A., St. James
Siniscal, A. A., Rolla
Stricker, Emil A., St. James
Underwood, Millard K., Rolla
Walden, Richard, Bourbon

PIKE COUNTY MEDICAL SOCIETY

Andrae, Robert L., Louisiana
Barrymore, Eugene, Bowling Green
Biggs, James B., Bowling Green
Cunningham, Eric A., Louisiana
Hooker, John H., Clarksville
Johnson, Q. Ray, Jr., Louisiana
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Middleton, John W., Louisiana
Scott, Clive D., Louisiana
Treadway, W. W., Silex
Wilcoxen, William B., Bowling Green

PLATTE COUNTY MEDICAL SOCIETY

Calvert, Lewis C., Weston
Durham, Silas L., Dearborn
Jennings, Ethlyn C., North Kansas City
Miller, Dean M., Platte City
Parker, H. Graham, Platte City
Robinson, John A., Edgerton
Underwood, Johnson, Parkville

POLK COUNTY
(Dallas-Hickory-Polk County Medical Society)

PULASKI COUNTY
(Phelps-Crawford-Dent-Pulaski-Maries-County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Ripley-Wayne County Medical Society)

ST. CHARLES COUNTY
(Lincoln-St. Charles County Medical Society)

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Mineral Area County Medical Society)

ST. LOUIS MEDICAL SOCIETY
(St. Louis)

Abell, Walter E., 2253 S. 39th St. (10)
Abrams, Morris, 4405 West Pine Blvd. (8)
Ackerman, Lauren V., 600 S. Kingshighway Blvd. (10)
Adler, Benard C., 887 Alanson Dr. (24)
Agress, Harry, 1045 Missouri Theatre Bldg. (3)
Aitken, Louis F., 732 Beaumont Medical Bldg. (8)
Albrecht, Franklin H., 505 University Club Bldg. (3)
Alden, Arthur M., 537 Frisco Bldg. (1)
Aldrich, James T., 2607a Franklin Ave. (6)
Alexander, Harry L., Barnes Hospital (10)
Alford, Leland B., 536 University Club Bldg. (3)
Allen, Duff S., 10 Oakleigh Lane (5)
Allen, Henry C., 212 Clayton Medical Bldg. (5)
Allen, Hollis N., 404 Missouri Theatre Bldg. (3)
Allen, Melvin A., 3701 Grandel Sq. (8)
Allen, Willard M., 630 S. Kingshighway Blvd. (10)
Allen, William E., Jr., 720 N. Sarah St. (8)
Altheide, J. Paul, 714 University Club Bldg. (3)
Alvis, Bennett Y., 903 Carleton Bldg. (1)
Alvis, Edmund B., 903 Carleton Bldg. (1)
Ambrose, Olney A., 932 Beach Ave. (12)
Andrews, Raleigh K., 235 Beaumont Medical Bldg. (8)
Anstey, George, 4660 Maryland Ave. (8)
Arneson, A. N., 457 N. Kingshighway Blvd. (8)
Arney, William G., 16 Hampton Village Plaza (9)
Arnold, Eugene L., 8700 Partridge Ave. (15)
Aronberg, Lawrence M., 4950 Lindell Blvd. (8)
Arzt, Franz, 420 Lido Drive, Fort Lauderdale, Fla.
Aufderheide, G. Russell, 4570 Fair Ave. (15)
Austin, Martin G., 1515 Lafayette Ave. (4)
Ayars, Treston R., 817 University Club Bldg. (3)
Azar, Philip L., Veterans Adm. Hospital (3)
Backer, Matt H., Jr., 9832 Ravensbrook Dr. (23)
Bailey, Drennan, 906 Olive St. (1)
Bailey, Frank A., 3108 S. Grand Blvd. (18)
Bailey, Fred W., 1147 16th Ave., N., St. Petersburg, Fla. (6)
Baker, Cecil G., Idaho State Hospital, South, Blackfoot, Idaho
Baker, Cecil H., 3555 Sidney St. (4)
Baker, William M., 3133 Hawthorne Blvd. (4)
Banet, Samuel R., 457 N. Kingshighway Blvd. (8)
Banton, William C., 11 N. Jefferson Ave. (3)
Bardenheier, J. Phil, 602 Wall Bldg. (8)
Barker, Jesse W., 1504 S. Jefferson Ave. (4)
Baron, William, 3601 S. Jefferson Ave. (18)
Barrett, Ralph M. S., 24 Ladue Terrace (24)
Barrett, Scott R., 1409 Euclid Ave. (13)
Bartels, Leo, 205 Frisco Bldg. (1)
Bartlett, Robert W., 929 University Club Bldg. (3)
Bartlett, Willard, Jr., 945 Missouri Theatre Bldg. (3)
Bartnick, Mitchel L., 3895 Holly Hills Blvd. (16)
Bassett, John W., U.S.S. Consolation, F.P.O. (AN-15), San Francisco, Calif.
Bassett, Robert B., 5427 Delmar Blvd. (12)
Bauer, John D., 2415 N. Kingshighway Blvd. (13)
Bauer, Louis, 2646 Gravois Ave. (18)
Bauer, Maria, 601 S. Brentwood Blvd (5)
Bauer, Otto, 601 S. Brentwood Blvd. (5)
Bauman, Charles M., 1106 Chemical Bldg. (1)
Baumgarten, Walter, Jr., 912 Beaumont Medical Bldg. (8)
Bawell, Malcolm B., 4660 Maryland Ave. (8)
Beare, J. Byron, 401 Beaumont Medical Bldg. (8)
Becke, William G., 912 Beaumont Medical Bldg. (8)
Becker, Edward J., 205 Frisco Bldg. (1)
Becker, George H., 210 Lister Bldg. (8)
Beckette, Edmund S., 320 Lister Bldg. (8)
Beckham, Genevieve S., 4950 Walsh Ave. (9)
Behrens, Donald T., A02240740 42nd Med. Group, S.A.C., Limestone, AFB., Maine
Beisbarth, Albert, 403 South Side National Bank Bldg. (16)
Beisbarth, Carl C., 801 Beaumont Medical Bldg. (8)
Bell, Robert M., 640 Beaumont Medical Bldg. (8)
Benincasa, Anthony V., 3731 Goodfellow Blvd. (20)
Benjamin, Durand, 7430 Virginia Ave. (11)
Berard, Louis N., 984 Arcade Bldg. (1)
Bercu, Bernard, 600 S. Kingshighway Blvd. (10)
Berg, Ralph, 3203 S. Grand Blvd. (18)
Bergman, Hugo F., 203 Beaumont Medical Bldg. (8)
Bergner, Grace E., 114 N. Taylor Ave. (8)
Berland, Harry I., 996 Arcade Bldg. (1)
Berman, Joseph P., 1225 N. Grand Blvd. (6)
Berman, William, 101 Pasteur Medical Bldg. (8)
Bernard, Harvey R., 600 S. Kingshighway Blvd. (10)
Berry, John W., 7261 Lindell Blvd. (5)
Bersche, Bertram L., 5214 Pernod Ave. (9)
Bettonville, Paul J., Jr., 8634 Eulalie Ave. (17)
Bieri, Earl J., 633 Metropolitan Bldg. (3)
Bierman, Max John, 245 Crandon Dr. (24)
Bilotta, Laurence A., Orlando Air Force Base, Orlando, Fla.
Bilsky, Nathan, 2739 N. Grand Blvd. (6)
Bindbeutel, Arthur H., 5203 Chippewa St. (9)
Bindbeutel, D. A., 5005th Hospital, A.P.O. 949, c/o Postmaster, Seattle, Wash.
Birdsall, Thomas C., 4660 Maryland Ave. (8)
Birsner, Louis J., 1232 Missouri Theatre Bldg. (3)
Bisno, Daniel, 101 S. Meramec (5)
Blache, J. Owen, 4924 Lotus Ave. (13)
Black, James M., 705 N. Kingshighway Blvd. (8)
Black, William D., 665 Kingsbury Pl. (5)
Blair, Vilray P., Rte. No. 1, Box 423, Florrissant
Blair, Vilray P., Jr., 502 Beaumont Medical Bldg. (8)
Bleyer, Adrien, 819 University Club Bldg. (3)
Block, Arnold S., 1041 Missouri Theatre Bldg. (3)
Bock, L. H., 1504 S. Grand Blvd. (4)
Bockelman, Clifford H., 2615 Brentwood Blvd. (17)
Boedeker, Roy V., 453 N. Taylor Ave. (8)
Boemer, L. C., 517 Beaumont Medical Bldg. (8)
Bohne, William R., 117 Lister Bldg. (8)
Bohrer, Harry C., 315 University Club Bldg. (3)
Boldizar, A. G., 1002 Beaumont Medical Bldg. (8)
Boldt, Thomas H., Maria Medical Center, 6000 W. Florissant (20)
Bondurant, Bryce H., 207 Beaumont Medical Bldg. (8)
Bowdern, Edward H., 16 Sussex Dr. (17)
Bowerman, Harold H., 823 University Club Bldg. (3)
Bowersox, Warren A., 400 Lister Bldg. (8)
Boyd, Arthur M., 1703 S. Grand Blvd. (4)
Bradley, Frank R., 600 S. Kingshighway Blvd. (10)
Bremser, Harry L., 1105 Tower Grove (10)
Brennan, J. Anthony, State Hosp. No. 4, Farmington
Brennan, Patricia A., 6420 Clayton Rd. (17)
Brennan, Robert A., 5417 S. Grand Blvd. (11)
Brennan, Robert V., 637 W. Adams (22)
Brereton, Robert L., 634 N. Grand Blvd. (3)
Bricker, Eugene M., 457 N. Kingshighway Blvd. (8)

Britt, Robert E., 816 Missouri Theatre Bldg. (3)
Brockelmann, Erich, 719 Metropolitan Bldg. (3)
Brodeur, Armand E., 2417 Hemlock Dr., Falls Church, Va.
Bromberg, Leon, 542 Missouri Theatre Bldg. (3)
Brookes, Henry S., Jr., 37 Algonquinwood Pl. (19)
Brookes, Robert D., 4652 Maryland Ave. (8)
Brooks, Arthur C., 60 Kingsbury Pl. (12)
Broun, Goronwy O., 1325 S. Grand Blvd. (4)
Brown, Daniel W., 4902 Northland Pl. (13)
Brown, E. Eugene, 379 N. Taylor Ave. (8)
Brown, James B., 400 Metropolitan Bldg. (3)
Brown, Seymour, 2 Ricardo Lane (2)
Bruce, Helen L., 3263 Hawthorne Blvd. (4)
Bryan, James H., 330 Beaumont Medical Bldg. (8)
Bryan, Theodore L., Address Unknown
Bryan, William T. K., 330 Beaumont Medical Bldg. (8)
Bublis, Mary D., Veterans Adm. Hosp., Temple, Texas
Bublis, Norbert J., Veterans Adm. Hosp., Temple, Texas
Buddy, E. P., 405 University Club Bldg. (3)
Bukantz, Samuel C., 600 S. Kingshighway Blvd (10)
Bulger, Harold A., 4405 West Pine Blvd. (8)
Burford, Cyrus E., 958 Arcade Bldg. (1)
Burford, E. Humber, 958 Arcade Bldg. (1)
Burke, Donald R., Jr., 1325 S. Grand Blvd. (4)
Burke, Robert J., 3310 Medical Group, Scott Field Air Force Base, Ill.
Burns, Francis J., 4660 Maryland Ave. (8)
Burns, Stanley S., 823 Missouri Theatre Bldg. (3)
Burns, Stanley S., Jr., 300 Gill Ave. (22)
Burst, Donald O., 501 Missouri Theatre Bldg. (3)
Busch, Anthony K., 5300 Arsenal St. (9)
Butcher, Harvey R., Jr., 600 S. Kingshighway Blvd. (10)
Byars, Louis T., 400 Metropolitan Bldg. (3)
Byrne, John E., 4936a Nottingham Ave. (9)
Byrns, Robert E., 3804 N. Grand Blvd. (7)
Calkins, Delevan, 8505 Delmar Blvd. (24)
Calodney, Martin M., 205 Lister Bldg. (8)
Cameron, Solon, 719 Metropolitan Bldg. (3)
Campbell, Cecil S., 952 Arcade Bldg. (1)
Campos, F. J., 405 Lister Bldg. (8)
Cannon, Edward M., 714 University Club Bldg. (3)
Cappel, Powel B., 3284 Ivanhoe Ave. (9)
Caravelli, Anthony F., 825 University Club Bldg. (3)
Carney, Joseph E., Jr., 525 Frisco Bldg. (1)
Carr, Archie D., 215 Beaumont Medical Bldg. (8)
Carrier, John A., 5840 Staley Ave. (23)
Carroll, George A., 304 University Club Bldg. (3)
Carroll, Grayson, 609 Humboldt Medical
Carter, William W., 723 University Club Bldg. (3)
Cason, Elbert H., 3606 Gravois Ave. (16)
Cassel, Melvin A., 2801 N. Taylor Ave. (15)
Cassidy, Leslie D., 4952 Maryland Ave. (8)
Catanzaro, Anthony F., 6525 Itaska Ave. (9)
Cavender, Savino W., Address Unknown
Chamness, James T., 929 University Club Bldg. (3)
Charles, Benjamin H., 912 Beaumont Medical Bldg. (8)
Charles, Cecil M., 110 S. Central (5)
Charnas, Raymond M., 727 Missouri Theatre Bldg. (3)
Chernoff, Amoz I., 6908 Millbrook Blvd. (5)
Cherre, Charles J., U. S. Marine Hosp., Norfolk, Va. (1)
Chieffi, Margaret, 735 Beaumont Medical Bldg. (8)
Ciapciak, Stanley J., 1901 Madison Ave. (6)
Clancy, James F., 424 University Club Bldg. (3)
Claridge, Ralph A., 7059 Deerpath Dr. (23)
Clark, J. Fred W., 864 Hamilton Ave. (12)
Clawson, James W., 4660 Maryland Ave. (8)
Cleary, Frank, 1935 Park Ave. (4)
Cleveland, Horace F., 1325 Somerset Pl., Long Beach, Calif. (7)
Clithero, W. Harvey, 906 Carleton Bldg. (1)
Coates, Thomas A., 1200 S. Big Bend Blvd. (17)
Coffin, Ernest L., Portage, Maine
Cohen, Benjamin H., 15 N. Brentwood Blvd. (5)
Cohen, Louis, 318 Lister Bldg. (8)
Collodi, George A., 3828 DeTonty St. (10)
Comens, Ruth C., 6150 Oakland Ave. (10)
Connor, John J., 433 Metropolitan Bldg. (3)
Conrad, Adolph H., 512 Beaumont Medical Bldg. (8)
Conrad, Adolph H., Jr., 512 Beaumont Medical Bldg. (8)
Conrad, Marshall B., 5441 Cabanne Ave. (12)
Cook, James T., 5536 Robin Ave. (20)
Cook, Jerome E., 4409 West Pine Blvd. (8)
Cook, Ralph L., 7135 Kingsbury (5)
Cooper, Henry T., 1115 Paul Brown Bldg. (1)
Copher, Glover H., 602 S. Euclid Ave. (10)
Cordonnier, Justin, 4960 Audubon Ave. (10)
Cornell, John C., 5005a Gravois Ave. (16)
Correnti, Nicholas A., 453 N. Taylor Ave. (8)
Cory, Harriet Stevens, 6157 Pershing Ave. (12)
Costa, Dominic V., 16 Hampton Village Plaza (9)
Costello, Cyril J., 1515 Lafayette Ave. (4)
Costello, Joseph P., 4952 Maryland Ave. (8)
Costello, Joseph P., Jr., 4952 Maryland Ave. (8)
Costen, James B., 722 Beaumont Medical Bldg. (8)
Coughlin, Bertrand D., 333 Metropolitan Bldg. (3)
Creane, John C., 2504 N. 14th St. (6)
Crego, Clarence H., Jr., 1033 Missouri Theater Bldg. (3)
Crossen, Robert J., 903 University Club Bldg. (3)
Crossman, Robert W., 514 University Club Bldg. (3)
Crowell, Hugh C., 8818 Gravois Ave. (23)
Cummings, James H., 444 N. Euclid Ave. (8)
Cutler, Harold M., 1018 Beaumont Medical Bldg. (8)
Czebrinski, Edward W., 3701 Grandel Sq. (8)
Daake, John W., 3817 Flora Pl. (10)
Dahms, Gustave, 1452 S. Grand Blvd. (4)
Dalton, Arthur R., 207 Lister Bldg. (8)
Daman, George A., 5203 Chippewa St. (9)
Dames, Richard J., 1515 Lafayette Ave. (4)
Danis, Peter G., 734 Missouri Theatre Bldg. (3)
Dankner, Arnold, 110 S. Central Ave. (5)
Daughaday, William H., 600 S. Kingshighway Blvd. (10)
Davie, Joseph, 406 Frisco Bldg. (1)
Davies, Dean F., 1717 Bellevue Ave. (17)
Davis, Frank L., 620 University Club Bldg. (3)
Davis, Martin W., 408 Humboldt Medical Bldg. (3)
Davis, Myron W., 718 Beaumont Medical Bldg. (8)
Davis, Thomas M., 2424 N. Grand Blvd. (6)
Day, Anthony B., 411 Beaumont Medical Bldg. (8)
Day, Cameron B., 2415 N. Kingshighway Blvd. (13)
Deakin, Rogers, 723 University Club Bldg. (3)
Demko, Frank, 1321 S. Broadway (4)
Demko, William, 3450 Gravois Ave. (18)
DePew, Heber B., 1446 S. Grand Blvd. (4)
Deppe, Arthur H., 835 University Club Bldg. (3)
Devine, John B., 16 Hampton Village Plaza (9)
DeWitt, Robert H., Garfield Memorial Hospital, Florida Ave. at 10th, Washington 1, D. C.
Diehr, Alvin H., 845 Missouri Theatre Bldg. (3)
DiLeo, Senatro W., 412 Humboldt Medical Bldg. (3)
Dmytryk, Eugene T., 518 University Club Bldg. (3)
Donahoe, James L., 1325 S. Grand Blvd. (4)
Dorsett, E. Lee, 8505 Delmar Blvd. (24)
Doubek, John C., 2767 Gravois Ave. (18)
Doyle, Charles R., 422 Missouri Theatre Bldg. (3)
Drace, Charles C., 3702 Gravois Ave. (16)
Drace, Charles C., Jr., 19 E. Lockwood Ave. (19)
Drake, Truman G., 114 N. Taylor Ave. (8)
Drake, William L., Jr., 307 S. Euclid Ave.
Drews, Leslie C., 516 Metropolitan Bldg. (3)
Drey, Norman W., 916 University Club Bldg. (3)
Dreyer, Carl J., 204 Kingsville Ct. (19)
Dripps, Roy C., 7702 Ivory Ave. (11)
Drum, Clarence G., 1927a N. Union Blvd. (13)
Duden, Charles W., 1011 Beaumont Medical Bldg. (8)
Duemler, John H., 1504 S. Grand Blvd. (4)
Duggan, John J., Jr., 7847 Wayne Ave. (14)
Dworkin, Saul, 6316 San Bonita Ave. (5)
Dyer, Dallas J., 16 Hampton Village Plaza (9)
Eades, Dee W., 12 Kingsbury Pl. (12)
Eagleton, Mark D., 600 S. Kingshighway Blvd. (10)
Earp, Ralph K., 912 Beaumont Medical Bldg. (8)
Eber, Carl T., 1010 Carleton Bldg. (1)
Eberle, John P., 3510 Medical Group, Randolph Air Force Base, Texas
Eberle, Vincent L., 4952 Maryland Ave. (8)
Echterhoff, Harry R., 945 Missouri Theatre Bldg. (3)
Eck, Birkle, 19 Deercreek Woods (5)
Eck, Peter A., 19 Deercreek Woods (5)
Eckert, Charles L., 600 S. Kingshighway Blvd. (10)
Eckert, Clarence T., 601 Humboldt Medical Bldg. (3)
Ecklund, Archibald M., Medical Dept., ADCOM., N.T.C., San Diego, Calif.
Edele, Eugene H., 4971 Chippewa St. (9)
Edelman, Mina K., 1515 Lafayette Ave. (4)
Edgerton, Winfield D., Address Unknown
Edwards, Joseph C., 1018 Beaumont Medical Bldg. (8)
Efron, Joseph, 800 Fairdale Ave. (19)
Egley, Loren E., 1116 Missouri Theatre Bldg. (3)
Eidelman, Jack R., 4652 Maryland Ave. (8)
Eidmann, Walter P., 3146 Morganford Rd. (16)
Eigel, Edwin G., 3211 S. Grand Blvd. (18)
Eimer, Charles E., 201 Pasteur Medical Bldg. (8)
Eisele, William M., Address Unknown
Eisenstein, Albert B., 818 S. Meramec Ave. (5)
Elam, James O., Dept. of Anesthesiology, Roswell Park Mem. Inst., 663 N. Oak St., Buffalo 3, N. Y.
Ellersieck, Dorothy M., 10695 Bellefontaine Rd. (15)
Elliott, Gladden V., 510 S. Kingshighway Blvd. (10)
Ellis, Sam T., 1609 Harrison Hill, Hannibal
Elman, Robert, 600 S. Kingshighway Blvd. (10)
Emmert, Frederick V., 713 Metropolitan Bldg. (3)
Engleman, Reinhold, 6000 W. Florissant (20)
Engman, Martin F., Jr., 601 Beaumont Medical Bldg. (8)
Epp, George J., 3807 Bowen St. (16)
Erlanger, Herman, 600 S. Kingshighway Blvd. (10)
Erlanger, Joseph, 4580 Scott Ave. (10)
Ernst, Edwin C., 100 Beaumont Medical Bldg. (8)
Ernst, Edwin C., Jr., 100 Beaumont Medical Bldg. (8)
Ernst, Roland P., 100 Beaumont Medical Bldg. (8)
Eskeles, Irwin H., 102 Lister Bldg. (8)
Esker, George, 5600 Arsenal St. (9)
Esslinger, Arthur T., 457 N. Kingshighway Blvd. (8)
Eto, Jackson, 634 Missouri Theatre Bldg. (3)
Evans, Fred L., 642 N. 3rd St., Chico, Calif.

Eyermann, Charles H., 1102 Missouri Theatre Bldg. (3)
Falk, O. P. J., 18 S. Kingshighway Blvd. (8)
Farley, William M., 3108 Grand Blvd. (18)
Farrar, John T., 44 Fairfax St., West Newton, Mass.
Farrell, Robert J., 624 N. Union Blvd. (8)
Farris, William W., 3505 N. Grand Blvd. (7)
Feinstein, Leon A., 705 Olive St. (1)
Feldman, David, 279th General Hospital, A.P.O. 53, San Francisco, Calif.
Feller, Harold H., 2739 N. Grand Blvd. (6)
Fellhauer, Carl M., 505 Humboldt Bldg. (3)
Fineberg, Maxwell, 301 University Club Bldg. (3)
Fingerhood, Marvin G., Address Unknown
Finnegan, Frank R., 201 Humboldt Medical Bldg. (3)
Finnegan, Joseph V., 633 Metropolitan Bldg. (3)
Fischer, Erich, 10 Pasteur Medical Bldg. (8)
Fischer, Harry W., 515 Lake Ave. (19)
Fish, Virgil O., 1114 Missouri Theatre Bldg. (3)
Fisher, Arthur O., 816 Beaumont Medical Bldg. (8)
Fitzgerald, Leo P., 6677 Delmar Blvd. (5)
Flader, Otto F., 6027 Margaretta Ave. (20)
Flance, Israel J., 4652 Maryland Ave. (8)
Flavan, David B., 401 Humboldt Medical Bldg. (3)
Fleishman, Alfred, 311 Pasteur Medical Bldg. (8)
Fletcher, Paul F., 517 Missouri Theatre Bldg. (3)
Flotte, Bernard H., 2435 N. Grand Blvd. (6)
Flynn, Edward P., 1515 Lafayette Ave. (4)
Flynn, John T., 1715 S. 39th St. (10)
Flynn, Joseph E., 1695 S. Brentwood Blvd. (17)
Forbes, Kenneth A., Letterman Army Hosp., San Francisco, Calif.
Ford, Lee T., Jr., 4952 Maryland Ave. (8)
Forsen, James A., 401 Wall Bldg. (8)
Forster, A. F., 5001st Medical Group A.A.C., A.P.O. 731, c/o Postmaster, Seattle, Wash.
Forster, Armand C., 1504 S. Grand Blvd. (4)
Forti, John J., 4703 Carter Ave. (15)
Foster, Howard M., 2025 North & South Rd. (14)
Foster, Leon, 727 Missouri Theatre Bldg. (3)
Fox, Robert E., 301 Humboldt Medical Bldg. (3)
Frank, Adolph M., 3701 Grandel Sq. (8)
Frankel, Sol I., 2621 S. Jefferson Ave. (18)
Franklin, Max S., 727 Missouri Theatre Bldg. (3)
Frazier, Donald B., 3714 Washington Blvd. (8)
Freedman, Harold, 717 University Club Bldg. (3)
Freedman, Ruth S., 323 Clara Ave. (12)
Freeman, David M., 7316 Kingsbury Ave. (5)
Freimuth, Louis E., 217 University Club Bldg. (3)
Frerking, Herbert W., 5535 Delmar Blvd. (12)
Freund, Newton M., 1119 Surrey Hill (17)
Freund, Samuel J., 4409 West Pine Blvd. (8)
Friedman, Bernard, Robert Koch Hosp., Koch
Fries, Armand D., 974 Arcade Bldg. (1)
Fries, John W., U. S. Naval Medical Center, Bethesda, Md.
Fries, William A., 3840a Fillmore Ave. (16)
Friskel, Arthur K., 7422 Devonshire Ave. (19)
Fritschel, G. C., 3306 S. 13th St. (18)
Fryer, Minot P., 400 Metropolitan Bldg. (3)
Funsch, Edwin C., 614 Beaumont Med. Bldg. (8)
Funsch, Robert E., 894 Alanson Drive (24)
Furla, Gus J., 9011 Cardinal Terrace (17)
Furlow, Leonard T., 530 Beaumont Medical Bldg. (8)
Gafney, George T., 1232 Missouri Theatre Bldg. (3)
Gaines, John F., Rte. No. 3, Box 392, Oklahoma City, Okla. (2)
Gale, Philip R., 125 Orchard Ave. (19)
Galeno, William A., Address Unknown
Gallagher, John F., 313 Wall Bldg. (8)
Gallagher, William J., 7214 Greenway Ave. (5)
Gansloser, Maximilian W., 3624 Arsenal St. (16)
Gansloser, Wilbert M., 6376 Clayton Rd. (17)
Gay, Lee Pettit, Osage City
Gerst, Aloysius C., 8833 Partridge (15)
Gerwitz, Bernard W., 16 Hampton Village Plaza (9)
Gibson, Helen F., 903 Carleton Bldg. (1)
Gildea, Edwin F., 640 S. Kingshighway Blvd. (10)
Gildea, Margaret C. L., 4500 West Pine Blvd. (8)
Gillespie, William J., 7522 Harter Ave. (17)
Gissy, Charles J., 617 Metropolitan Bldg. (3)
Glaser, Martin J., 420 Mississippi Valley Trust Bldg. (1)
Glaser, Robert J., 4960 Audubon Ave. (10)
Glassberg, Bertrand Y., 212 Lister Bldg. (8)
Glenn, Joseph E., 958 Arcade Bldg. (1)
Glennon, William P., 634 University Club Bldg. (3)
Glick, Harry N., 1504 S. Grand Blvd. (4)
Gnade, Albert J., 3606 Gravois Ave. (16)
Goebel, Joan M., No. 9 Tuscany Park (5)
Goldenson, Max J., 433 Metropolitan Bldg. (3)
Goldfarb, Alvin, 457 N. Kingshighway Blvd. (8)
Goldman, Alfred, 1215 Missouri Theatre Bldg. (3)
Goldman, Melvin L., 1215 Missouri Theatre Bldg. (3)
Gorla, Wayne O., 202 Lindell Trust Bldg. (6)
Gottschalk, Helen C. R., c/o L. A. Gottschalk, Cincinnati Gen Hosp., Cincinnati 29, Ohio
Gradwohl, R. B. H., 3514 Lucas Ave. (3)
Graham, David T., 600 S. Kingshighway Blvd. (10)
Graham, Evarts A., 602 S. Euclid Ave. (10)
Graneto, Joseph A., 5521 S. Broadway (11)
Grant, Samuel B., 114 N. Taylor Ave. (8)
Graul, Elmer G., 2838 S. Grand Blvd. (18)
Graul, Walter P., 420 Darst Rd. (21)
Gray, Vernon, 640 S. Kingshighway Blvd. (10)
Grebel, Clement B., 16 Hampton Village Plaza (9)
Greditzer, Arthur S., 4500 West Pine Blvd. (8)
Greiner, Theodore, 7507 Washington Ave. (5)
Griggs, James Y., 106 S. Central (5)
Grindon, Joseph, Jr., 501 Humboldt Medical Bldg. (3)
Grogan, F. M., 816 Missouri Theatre Bldg. (3)
Gross, Joseph L., 729 Missouri Theatre Bldg. (3)
Grueb, Paul M., 3402a California Ave. (18)
Gruenfeld, Gerhard E., 201 Lister Bldg. (8)
Guccione, Joseph B., 8515 Colonial Lane (24)
Gulick, Charles R., 235 Beaumont Medical Bldg. (8)
Gum, William R., 2227 S. Broadway (4)
Gummels, Belmont B., 1116 McCausland Ave. (17)
Gundlach, Arthur, 2202 University St. (7)
Gunn, Walter T., 4617 Dahlia Ave. (16)
Guze, Samuel B., 600 S. Kingshighway Blvd. (10)
Gzell, Ronald, 5189 Kensington Ave. (8)
Hackmeyer, Rubin, 4703a Virginia Ave. (11)
Haddock, James N., 4500 West Pine Blvd. (8)
Haffner, Heinz, 816 Beaumont Medical Bldg. (8)
Hagebusch, Omer E., 3714 Washington Ave. (8)
Hager, Victor K., 4922a Hampton Ave. (9)
Hall, Andy, Jr., 301 University Club Bldg. (3)
Hall, Lee A., 504 Missouri Theatre Bldg. (3)
Hall, Preston C., 4243 Lafayette Ave. (10)
Hall, Robert A., 43 Washington Ter. (12)
Hamilton, Eugene G., 8505 Delmar Blvd. (24)
Hamilton, William P., 24 Gast Pl. (15)
Hammond, John J., 734 Missouri Theatre Bldg. (3)
Hampton, Stanley F., 1018 Beaumont Medical Bldg. (8)
Hanford, Charles W., Address Unknown
Hanford, Wesley W., 601 University Club Bldg. (3)
Hankin, Norman M., 16 Hampton Village Plaza (9)
Hanlon, C. Rollins, 1325 S. Grand Blvd. (4)
Hansel, French K., 1222 Missouri Theatre Bldg. (3)
Hanser, S. Albert, 924 Arcade Bldg. (1)
Hanser, Theodore H., 3701 Grandel Sq. (8)
Hardy, Joseph A., Jr., 4952 Maryland Ave. (8)
Harell, Alex, 216 Wall Bldg. (8)
Harford, Carl G., 600 S. Kingshighway Blvd. (10)
Harkins, William B., 218 Beaumont Medical Bldg. (8)
Harmann, Martin F., 206 Lindell Trust Bldg. (6)
Harnagel, Dana Lee, 2916 Palm St. (7)
Harris, Charles W., 5298a Page Blvd. (13)
Harris, Downey L., 706 Metropolitan Bldg. (3)
Harris, Irwin J., 7427 Bland Dr. (5)
Harris, Solon P., 6826 Natural Bridge Ave. (20)
Harrison, Lee B., 601 University Club Bldg. (3)
Harting, Hugh R., 7564 Buckingham Dr. (5)
Hartman, Howard E., 5417 Christy Blvd. (16)
Hartman, Paul T., 6376 Clayton Rd. (17)
Hartmann, Alexis F., 500 S. Kingshighway Blvd. (10)
Hartnett, Dalton C., 422 Missouri Theatre Bldg. (3)
Hartnett, Leo J., 422 Missouri Theatre Bldg. (3)
Hartwig, John A., 2807 N. Grand Blvd. (7)
Haskins, Arthur L., 630 Kingshighway Blvd. (10)
Hassett, Henry A., 618 University Club Bldg. (3)
Hawk, Bray O., 4660 Maryland Ave. (8)
Hawker, William D., 16 Hampton Village Plaza (9)
Hawkins, George L., Jr., 625 University Club Bldg. (3)
Hayden, Loyola F., 730 Hodiamont Ave. (12)
Haynes, Pugh, Jr., 203 Beaumont Medical Bldg. (8)
Healey, Robert J., 1515 Lafayette Ave. (4)
Heaney, Robert P., 825 N.E. 13th St., Oklahoma City, Okla.
Heideman, Alvah G., 723 Metropolitan Bldg. (3)
Heifetz, Carl J., 457 N. Kingshighway Blvd. (8)
Heinbecker, Peter, 600 S. Kingshighway Blvd. (10)
Heinemann, Sol, 306 Humboldt Medical Bldg. (3)
Helbing, Harry H., 7546 Ethel Ave. (17)
Henderlite, John W., 408 Lister Bldg. (8)
Henke, Charles F., 3109 S. Grand Blvd. (18)
Hennelly, John J., 16 Hampton Village Plaza (9)
Hennerich, Walter E., 5670 Arsenal St. (9)
Henschel, Eugene V., 6200 Hoffman Ave. (9)
Herdener, Russell L., U.S.V.A. Hospital, Vancouver, Wash.
Herman, Morris, 3701 Grandel Sq. (8)
Herrick, Harold C., 5747 Bartmer Ave. (12)
Hewitt, Walter R., 7649 Delmar Blvd. (5)
Heyer, Oscar C., 8015 S. Broadway (11)
Hickey, Robert F., 916 Missouri Theatre Bldg. (3)
Hildreth, H. Rommel, 1030 Beaumont Medical Bldg. (8)
Hill, Roland, 5147 Waterman Ave. (8)
Hillenbrand, H. Melvin, 74 Wildwood Lane (22)
Hines, Arthur A., 10695 Bellefontaine Rd. (15)
Hobart, Carl A., 3601a Gravois Ave. (16)
Hoefer, Walter H. V., 3108 S. Grand Blvd. (18)
Hoffmann, A. David, 6222 Delor St. (9)
Hoffmann, Ronald E., 601 S. Brentwood Blvd. (5)
Hofstatter, Leopold, 103 Lister Bldg. (8)
Hofstatter, Lilli, 10053 Lakeside Dr. (23)
Holdenried, William E., 4131 Tholozan Ave. (16)

Hollo, Vencel W., 4960 Laclede Ave. (8)
Holt, Earl P., Jr., 5444 Clemens Ave. (12)
Homan, Joseph S., 4903 Delmar Blvd. (8)
Honich, Nicholas J., 8902 Riverview Blvd. (21)
Hooss, Albert, 8000 Rosiline Dr. (5)
Hopkins, Thomas A., 4411 Forest Park Ave. (8)
Horner, John L., 114 N. Taylor Ave. (8)
Horwitz, Irwin B., 504 Metropolitan Bldg. (3)
Hosto, Leland E., 4909 Lindenwood Ave. (9)
Houston, Vincent T., 106 S. Central Ave. (5)
Hrdlicka, Victor E., 1020 Missouri Theatre Bldg. (3)
Huber, Erwin T., 913 Missouri Theatre Bldg. (3)
Huber, Melvin J., 737 Missouri Theatre Bldg. (3)
Huckstep, Robert A., U.S.P.H.S. Hosp., Fort Worth, Texas (1)
Huggins, Albert M., 142 E. Holland Drive, Irving, Texas
Hulbert, Bernard, 16 Pasteur Medical Bldg. (8)
Hummel, Anton J., 416 Metropolitan Bldg. (3)
Hunter, Charles H., 2601 Whittier St. (8)
Hutchinson, James H., Jr., 114 N. Taylor Ave. (8)
Hutto, A. Herman, 105 Lister Bldg. (8)
Hutton, Joseph Lewis, 902 South Side National Bank Bldg. (16)
Hyman, Anna, 5400 Arsenal St. (9)
Hyndman, Charles E., 714 Beaumont Medical Bldg. (8)
Inkley, John J., 5203 Chippewa St. (9)
Israel, Milton R., 311 Hillside Ave. (19)
Ittner, George W., Jr., 901 Beaumont Medical Bldg. (8)
Jacobs, Charles C., 878 Melvin St. (15)
James, Norman A., 9903 Diamond Dr. (15)
James, William M., 1030 Beaumont Medical Bldg. (8)
Janney, James G., Jr., 35 N. Central Ave. (5)
Jaudon, Joseph C., 46 Glen Rd. (19)
Javaux, Everett J., 405 University Club Bldg. (3)
Jean, J. Ted, 4500 West Pine Blvd. (8)
Jensen, J. Ernest, 1140 Missouri Theatre Bldg. (3)
Jesgar, William, 5647 Delmar Blvd. (12)
Jim, Robert T. S., 600 S. Kingshighway Blvd. (10)
Johnson, Charles H., 4148 Federer Pl. (16)
Johnson, Mitchell D., 40 N. Florissant Rd. (21)
Johnstone, John, Jr., 1011 Beaumont Medical Bldg. (8)
Jones, Andrew B., 322 Beaumont Medical Bldg. (8)
Jones, Augustin, 543 Missouri Theatre Bldg. (3)
Jones, Grey, 215 Lister Bldg. (8)
Jones, Otey S., 3616 S. Broadway (18)
Jones, Richard A., 332 Calvert Ave. (19)
Jones, Vincent L., 645 Missouri Theatre Bldg. (3)
Jones, William E., 110 S. Central Ave. (5)
Jordan, Edward J., 1504 S. Grand Blvd. (4)
Jordan, Walter R., 503 Wall Bldg. (8)
Jorstad, Louis H., 411 Beaumont Medical Bldg. (8)
Joseph, Donald J., 107 E. 3rd St., O'Fallon, Ill.
Joslyn, Harold L., 521 Missouri Theatre Bldg. (3)
Jost, Charles A., 6000 W. Florissant Rd. (20)
Judy, Joseph D., 212 S. Florissant Rd. (21)
Jungk, Carl G. W., 2278 S. Jefferson Ave. (4)
Kane, Clyde E., 706 Walton Ave. (8)
Kane, R. Emmet, 1117 N. Grand Blvd. (6)
Kaplan, Albert, 726 Country Club Dr. (21)
Kappesser, Netajean B., 7044 Lindell Blvd. (5)
Kappesser, Roland C., 7044 Lindell Blvd. (5)
Karandjeff, A. D., 811 Metropolitan Bldg. (3)
Karl, Michael M., 4652 Maryland Ave. (8)
Kaskie, Clifford R., 35 N. Central Ave. (5)
Katz, Samuel D., 825 Midland Ave. (5)
Keating, John U., 457 N. Kingshighway Blvd. (8)
Keeble, Charles B., 3102 S. Grand Blvd. (18)
Keezer, William S., 515 Perry St., Vincennes, Ind.
Keffler, Karl L., 1139 Bellevue Ave. (17)
Kehoe, John J., 4145 St. Louis Ave. (15)
Keim, John P., 2730 McNair Ave. (18)
Keller, Joseph M., 416 Metropolitan Bldg. (3)
Keller, Louis, 35 N. Central Ave. (5)
Keller, Maurice J., 3701 Grandel Sq. (8)
Keller, Niklaus, J. A., Jr., Walter Reed Army Hosp., Washington, D. C. (25)
Kellett, John G., 243 Kenora Ct. (19)
Kelley, Isaac D., Jr., 476 N. Kingshighway Blvd. (8)
Kelley, Robert W., 622 Beaumont Medical Bldg. (8)
Kelly, Charles A., 3606 Gravois Ave. (16)
Kelly, R. Emmet, 6335 Waterman Ave. (5)
Kenamore, Bruce, 457 N. Kingshighway Blvd. (8)
Kennedy, Francis L., 1001 Missouri Theatre Bldg. (3)
Kerr, David N., 217 Lister Bldg. (8)
Kettelkamp, George D., 4931 Potomac St. (9)
Key, J. Albert, 4952 Maryland Ave. (8)
Keyes, E. Lawrence, 4952 Maryland Ave. (8)
Kieffer, Roland S., 402 Lister Bldg. (8)
Kieffer, Victor B., Jr., 4500 Olive St. (8)
Kienzle, Edward C., 2800a Chippewa St. (18)
King, Francis C., 27 York Dr. (17)
King, John V., 689 E. Big Bend Blvd. (19)
King, Samuel J., 800 Carleton Bldg. (1)
Kinner, Helmuth M., 3014 S. Jefferson Ave. (18)
Kinsella, Dalton L., Jr., 4404 Lindell Blvd. (8)
Kinsella, Ralph A., 415 Beaumont Medical Bldg. (8)
Kinsella, Ralph A., Jr., 9084 West Swan Circle (17)
Kirchner, Walter C. G., 7452 Wise Ave. (17)
Kirstein, Melvin B., 209 University Club Bldg. (3)
Kirtz, Louis P., 4952 Maryland Ave. (8)
Kistner, William F., 6683 Washington Ave. (5)
Kiyasu, Robert K., 2191 Pine St., San Francisco, Calif. (1)
Klaff, Daniel D., 309 Beaumont Medical Bldg. (8)
Klein, Andrew G., 2959 Milton Blvd. (4)
Klein, Arnold G., 2632 S. Kingshighway Blvd. (9)
Klein, Arthur, P. O. Box 693, Perry Point, Md.
Klein, Bert H., 2632 S. Kingshighway Blvd. (9)
Klein, Harry A., 5074 N. Union Blvd. (15)
Kleinschmidt, Clinton, 827 Metropolitan Bldg. (3)
Klemme, Roland M., 4952 Maryland Ave. (8)
Klenk, Charles L., 420 Metropolitan Bldg. (3)
Klippel, Allen P., 5521 January Ave. (9)
Klippel, Bernhardt W., 3701 Grandel Sq. (8)
Klym, Nicholas, 3626 N. 11th St. (7)
Kneal, E. Ellsworth, 921 Missouri Theatre Bldg. (3)
Knese, Luke A., 1506 Hodiamont Ave. (12)
Knight, Franklin P., 9746 Colony Drive (15)
Knight, William A., 8201 N. Broadway (15)
Knight, William A., Jr., 4161 Lindell Blvd. (8)
Knoke, Frederick W., Jr., 4535 Wabash Ave. (9)
Knowlton, Norman P., Jr., 502 Beaumont Medical Bldg. (8)
Koenig, George H., 5135 31st Ave., S., St. Petersburg, Fla. (1)
Koenig, Karl F., 502 Beaumont Medical Bldg. (8)
Kohler, Eugene J., 4968a Delmar Blvd. (8)
Kohler, Louis H., 5300 Arsenal St. (9)
Komanetsky, W. M., 6400 Morganford Rd. (16)
Koon, Bernard T., 4755a Morganford Rd. (16)
Kopp, Leonard J., 7844 Madison Dr. (14)
Korn, Robert L., 567 U.S.A.F. Hospital, McChord A.F.B., Washington
Kotkis, Alexander J., 80 York Dr. (17)
Kotner, Lawrence M., 4409 West Pine Blvd. (8)
Kountz, William B., 415 Lister Bldg. (8)
Kouri, Martin F., 3705 Washington Ave. (8)
Koutsoumpas, William V., 1405 S. Broadway (4)
Kowert, Edward H., 208 Metropolitan Bldg. (3)
Kraft, Edward O., 2019 St. Clair (17)
Kramer, Fred, 4161 Lindell Blvd. (8)
Kramolowsky, H. H., 986 Arcade Bldg. (1)
Krause, G. Lynn, 614 Beaumont Medical Bldg. (8)
Krebs, Joseph M., 910 Missouri Theatre Bldg. (3)
Krebs, Otto S., 207 Beaumont Medical Bldg. (8)
Kromer, Charles, 6606 Oleatha Ave. (9)
Kubitschek, Paul F., 207 Beaumont Medical Bldg. (8)
Kuebrich, Thomas C., 9a S. Florissant Rd. (21)
Kurtzeborn, Edwin E., 4120 Leona St., Tampa 9, Fla.
Kurz, R. F., 1148 Pierce Bldg. (2)
LaDriere, Raymond J., 35 N. Central Ave. (5)
Lam, Robert Lee, 600 S. Kingshighway Blvd. (10)
Lamb, Wanda, 4580 Scott Ave. (10)
Lammert, Thomas K., 14 Hillcrest, New Rochelle, N. Y.
Landree, James C., 437 University Club Bldg. (3)
Lane, Clinton W., 440 Beaumont Medical Bldg. (8)
Langan, William J., Jr., 5803 Plymouth Ave. (12)
Lange, Adolph C., 512 Wall Bldg. (8)
Lanier, Earl W., 307 S. Euclid Ave. (10)
Lansche, Elmer A., 4885 Natural Bridge Ave. (15)
Larimore, Joseph W., 626 Beaumont Medical Bldg. (8)
Larsen, Kenneth V., 819 University Club Bldg. (3)
Lassar, Gilbert N., 1307 Washington Ave. (3)
Lawrence, George H., 607 N. Grand Ave. (3)
Lawrence, John V., 4534 West Pine Blvd. (8)
Lawton, John T., 410 N. Newstead Ave. (8)
Lawton, Lawrence W., 2801 N. Taylor Ave. (15)
Lawton, Thomas P., 2739 N. Grand Blvd. (6)
LeBlanc, Leo J., 708 Beaumont Medical Bldg. (8)
Lederman, Joseph, 2400a N. Grand Blvd. (6)
Lee, Elbert J., Jr., 220 N. 4th St. (2)
Lembeck, Joseph A., 601 University Club Bldg. (3)
Lenobel, Milton I., 504 Metropolitan Bldg. (3)
Lerwick, Everett R., 919 N. Taylor Ave. (8)
Levin, Sidney S., 440 N. Taylor Ave. (8)
Levitt, Joseph, 5815a Highland Ave. (12)
Levy, Irwin, 4952 Maryland Ave. (8)
Lewis, James E., Jr., 1325 S. Grand Blvd. (4)
Leydig, Stanley M., 16 Hampton Village Plaza (9)
Lieb, Otto V., 307 Lister Bldg. (8)
Liese, Grover B., 316 Beaumont Medical Bldg. (8)
Liggett, Hiram S., 401 Beaumont Medical Bldg. (8)
Lindeman, Carl H., 4126 Shreve Ave. (15)
Lipsitz, Ellis S., 457 N. Kingshighway Blvd. (8)
Lischer, Carl E., 457 N. Kingshighway Blvd. (8)
Littauer, David, 216 S. Kingshighway Blvd. (10)
Littmann, Lewis E., 8231 Clayton Rd. (17)
Litzow, Louis T., 1114 Missouri Theatre Bldg. (3)
Loeb, Virgil, 309 Beaumont Medical Bldg. (8)
Loeb, Virgil, Jr., 600 S. Kingshighway Blvd. (10)
Loeffel, Ellen S., 635 Beaumont Medical Bldg. (8)
Lohr, Curtis H., 601 S. Brentwood Blvd. (5)
Londe, Sol, 201 Lister Bldg. (8)
Lonergan, Warren M., 457 N. Kingshighway Blvd. (8)
Lonsway, Maurice J., 8225 Clayton Rd. (17)
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Luedde, Philip S., 16 Hampton Village Plaza (9)
Lund, Herluf G., 2864 Lawndell Dr. (17)
Luten, Drew W., 502 Beaumont Medical Bldg. (8)
Lutz, Martin H., Lincoln Mercury Div., Ford Motor Co., Robertson
Lyman, Edward H., 906 Carleton Bldg. (1)
Lynxwiler, Chester P., 1325 S. Grand Blvd. (4)
Lyttle, Garnet C., 2407a N. Broadway (6)
Lytton, William B., 29 Overhill Dr. (17)
McAdam, C. Rush, 525 Frisco Bldg. (1)
McAfee, C. Alan, 457 N. Kingshighway Blvd. (8)
McCarroll, Henry R., 614 Beaumont Medical Bldg. (8)
McCarthy, Eugene F., 5070 Westminster Pl. (8)
McCloskey, R. Bruce, 4500 Olive St. (8)
McDonald, George H., 5795 Pershing Ave. (12)
McDonald, John J., 630 S. Kingshighway Blvd. (10)
McDowell, Frank S., 400 Metropolitan Bldg. (3)
McElvain, Robert C., 4356 Warne Ave. (7)
McFadden, James F., 940 Missouri Theatre Bldg. (3)
McFadden, James F., Jr., 940 Missouri Theatre Bldg. (3)
McFarlane, John A., Address Unknown
McGahan, John J., Bureau of Indian Affairs, U.S.P.H.S., Crow Agency, Montana
McGennis, Patrick, P. O. Box 603 (1)
McGinnis, Albert E., 600 S. Kingshighway Blvd. (10)
McGinnis, Byron J., 16 Hampton Village Plaza (9)
McGuire, William A., 2322 N. Kingshighway Blvd. (13)
McLelland, Richard I., 4385 Maryland Ave. (8)
McMahon, Alphonse, 806 Missouri Theatre Bldg. (3)
McMahon, Bernard J., 8230 Forsyth Blvd. (24)
McNamara, John J., 10300 St. Charles Rock Road (14)
McNamee, Owen J., 7619 Ivory Ave. (11)
McNamee, William F., 7619a Ivory Ave. (11)
McNeel, John O., 1127 Pine St. (1)
McSwiney, John G., 5014 Thekla Ave. (15)
Maas, Hermann, 827 Metropolitan Bldg. (3)
MacBryde, Cyril M., 429 Missouri Theatre Bldg. (3)
Mack, Robert E., 1325 S. Grand Ave. (4)
Mackey, John F., Jr., 994 Arcade Bldg. (1)
Macko, Joseph R., 1303 N. Kingshighway Blvd. (13)
Macnish, James M., 4405 West Pine Blvd. (8)
Macon, William L., Jr., 7158 Manchester Ave. (17)
Magallon, Dorothy T., 1527 David, Memphis, Tenn.
Maher, Thomas F., Address Unknown
Maizus, S. H., 405 South Side National Bank Bldg. (16)
Malles, A. Conrad, 819 University Club Bldg. (3)
Manion, Peter J., 3915 Brannon Ave. (9)
Mannis, Ben G., 846 N. McKnight Rd. (24)
Mansbacher, Kurt, 301 Pasteur Medical Bldg. (8)
Manting, George, 211 Roosevelt Hotel Bldg. (8)
Marston, Warren G., 325 University Club Bldg. (3)
Martin, Charles E., 4020 W. Florissant Ave. (7)
Martin, Maynard W., 5535 Delmar Blvd. (12)
Martin, Raymond T., 5203 Chippewa St. (9)
Martin, Thomas M., 937 Missouri Theatre Bldg. (3)
Mason, Roy E., 410 Frisco Bldg. (1)
Massie, Edward, 457 N. Kingshighway Blvd. (8)
Masters, William H., 630 S. Kingshighway Blvd. (10)
Mastin, E. Vernon, 930 Beaumont Medical Bldg. (8)
Mathae, George H., 3167 S. Grand Blvd. (18)
Mathes, Sydney B., 4652 Maryland Ave. (8)
Matthews, John G., 3707 Watson Rd. (9)
Mattis, Robert D., 1119 Missouri Theatre Bldg. (3)
Maughs, Sydney B., 4500 West Pine Blvd. (8)
Max, C. O. C., 701 Beaumont Medical Bldg. (8)
Max, Paul F., 701 Beaumont Medical Bldg. (8)
Maxwell, Richard W., 8126 Teasdale Ave. (24)
Maze, Lawrence E., 630 S. Kingshighway Blvd. (10)
Medler, Francis J., 4114 W. Florissant Ave. (15)
Mehan, George T., 414 Wall Bldg. (8)
Meinberg, William H., 320 Frisco Bldg. (1)
Meiners, Edwin P., 6651 Enright Ave. (5)
Meiners, Theodore M., 922 Newport Ave. (19)
Meisenbach, A. Edward, 410 Wall Bldg. (8)
Melick, William F., 306 Humboldt Medical Bldg. (3)
Mellies, Eugene G., 7503 Florissant Rd. (21)
Mellies, George A., 2917 St. Louis Ave. (6)
Mendeloff, Albert I., 507 S. Euclid Ave. (10)
Mendosa, Lawrence E., 837 University Club Bldg. (3)
Merenda, Sam J., 1695 Brentwood Blvd. (17)
Merklin, Anton L., 3507 Potomac St. (18)
Merz, Jean J., 24 Ladue Terrace (24)
Metz, Charles O., 3102a S. Grand Blvd. (18)
Meyer, Curtis A., 6534 Walsh Ave. (9)
Meyer, Herman M., 4409 West Pine Blvd. (8)
Meyer, Oscar D., 6029 S. Kingshighway Blvd. (9)
Meyerhardt, Milton H., 4409 West Pine Blvd. (8)
Meyers, John B., 401 Humboldt Bldg. (3)
Meyers, Montague M., Address Unknown
Mezera, Raymond A., 201 Humboldt Medical Bldg. (3)
Michael, Vernon E., 957 Arcade Bldg. (1)
Michaelree, John F., 2816 Sutton Ave. (17)
Middleman, Isadore C., 211 Pasteur Medical Bldg. (8)
Mier, Thomas M., 703 University Club Bldg. (3)
Milder, Benjamin, 501 Humboldt Medical Bldg. (3)
Miller, Charles W., 408 Humboldt Medical Bldg. (3)
Miller, H. Edward, 425 Oak St. (19)
Miller, Perry B., Harbor Hospital, Detroit, Mich. (33)
Millikin, L. A., 2608 S. Kingshighway Blvd. (9)
Mills, Warren B., 1420 Grattan St. (4)
Milster, Clyde R., 409 Frisco Bldg. (1)
Mistachkin, Norman L., 300 Wall Bldg. (8)
Mitchell, Roy Earl, Salem
Moeller, Carl E., 3537 S. Jefferson Ave. (18)
Molholm, Hans B., 1960 West Broad St., Columbus, Ohio
Montani, Charles, 5147 Daggett Ave. (10)
Moore, Carl V., 600 S. Kingshighway Blvd. (10)
Moore, Neil S., 7299 Westmoreland Dr. (5)
Moore, Robert A., Falk Clinic, University of Pittsburgh, Pittsburgh, Pa.
Moore, Sherwood, 600 S. Kingshighway Blvd. (10)
Moore, Walter L., 6 Clayton Ter. (24)
Moore, William A., 925a Goodfellow Blvd. (12)
Morfit, John C., 7112 Wydown Ave. (5)
Morrin, Kevin C., 5251 Westminster Pl. (8)
Morris, Harvey E., 8005 Audrain Dr. (21)
Morris, Mary E., 719 Metropolitan Bldg. (3)
Moskop, Peter G., 3736 Dunnica Ave. (16)
Motzel, Albert J., 6238 Washington Ave. (5)
Mountjoy, Grace Scholz, 4439 Floriss Pl. (15)
Mowrey, William O., 3633 Fair Ave. (15)
Moyer, Carl A., 7516 Washington Ave. (5)
Muckerman, Richard I. C., 433 Missouri Theatre Bldg. (3)
Mudd, J. Gerard, 35 Godwin Lane (17)
Mudd, James L., 914 Missouri Theatre Bldg. (3)
Mueller, C. Barber, 5238 Murdock Ave. (9)
Mueller, Clarence E., 1020 Missouri Theatre Bldg. (3)
Mueller, Joseph A., 2924 S. Grand Blvd. (18)
Mueller, Morris A., 11 Long Meadows R. No. 1 (24)
Mueller, Robert, 974 Arcade Bldg. (1)
Mueller, Robert J., 16 Hampton Village Plaza (9)
Mueller, W. K., 601 University Club Bldg. (3)
Muenster, Joseph J., Jr., 1753 W. Congress St., Chicago, Ill.
Muether, Raymond O., 4161 Lindell Blvd. (8)
Mulligan, Leo V., 916 Missouri Theatre Bldg. (3)
Munsch, Augustus P., 306 Humboldt Medical Bldg. (3)
Munsch, Girard A., 33 N. Meramec Ave. (5)
Murphy, James P., 934 University Club Bldg. (3)
Murphy, John C., 228 Beaumont Medical Bldg. (8)
Murphy, John P., 308 Lister Bldg. (8)
Murphy, Paul, 3842 Flora Pl. (10)
Murray, Louis F., 605 Russell Blvd. (4)
Mutshnick, Clara P., 3103 Shenandoah Ave. (4)
Myers, E. Lee, 208 Wall Bldg. (8)
Naryka, Joseph J., 306 Humboldt Medical Bldg. (3)
Nash, Helen E., 1048a N. Vandeventer Ave. (13)
Neilson, Arthur W., 306 Humboldt Medical Bldg. (3)
Neilson, Charles H., 6319 Alexander Dr. (5)
Nelson, William, 5449 Delmar Blvd. (12)
Nemec, Stanley S., 205 Wall Bldg. (8)
Nester, Charles A., 5600 S. Compton Ave. (11)
Nester, Gerard A., 5600 S. Compton Ave. (11)
Neumann, Roland F., Jr., 418 Beaumont Medical Bldg. (8)
Neun, W. F., 5862 Delor St. (9)
Neman, Harold G., 5 Lindworth Lane (17)
Newman, Percy, 3539 Hartford St. (18)
Nichols, Charles E., 7158 Manchester Ave. (17)
Nicholson, Clarence M., Pennsylvania Hotel, St. Petersburg, Fla. (1)
Nicolai, Charles H., R.R. No. 1, Box 626 (24)
Niesen, Frank J., 4209 S. Kingshighway Blvd. (9)
Noah, Joseph W., 625 University Club Bldg. (3)
Nofles, James W., 4108a Easton Ave. (13)
Nolan, Charles J., 736 University Club Bldg. (3)
Noller, Henry W., 540 Beaumont Medical Bldg. (8)
Northup, Glenn R., 740 S. 4th St. (2)
Norton, William H., 729 Missouri Theatre Bldg. (3)
Nye, Robert S., 3201 Arsenal St. (18)
Obermeyer, Charles G., 3103 Arsenal St. (18)
O'Brien, Edward C., Veterans Adm. Center, Shreveport, La. (47)
O'Brien, Robert M., 4161 Lindell Blvd. (8)
Odell, Richard T., 600 S. Kingshighway Blvd. (10)
O'Donnell, Joseph V., 408 Humboldt Medical Bldg. (3)
O'Dowd, James A., 2919 S. Kingshighway Blvd. (9)
Ogura, Joseph H., 9080 W. Swan Circle (17)
Ohmoto, Masao, 317 University Club Bldg. (3)
O'Keefe, Charles D., 718 Beaumont Medical Bldg. (8)
O'Leary, James L., 660 S. Kingshighway Blvd. (10)
Olmsted, William H., 1011 Beaumont Medical Bldg. (8)
O'Malley, Eugene J., 614 Missouri Theatre Bldg. (3)
O'Neal, Lawrence W., 600 S. Kingshighway Blvd. (10)

O'Neill, John B., 1222 Missouri Theatre Bldg. (3)
Oppenheimer, Henry E., 327 Metropolitan Bldg. (3)
O'Reilly, Daniel E., 4161 Lindell Blvd. (8)
Orenstein, Joseph M., 108 Lister Bldg. (8)
Orgel, M. Norman, 626 Metropolitan Bldg. (3)
Orrahood, M. David, 1402 S. Grand Blvd. (4)
O'Sullivan, George A., 421 Schirmer St. (11)
Owen, James W., Jr., 625 University Club Bldg. (3)
Paine, Robert, 901 Beaumont Medical Bldg. (8)
Palazzo, Frank A., 4161 Lindell Blvd. (8)
Paletta, Francis X., 940 Missouri Theatre Bldg. (3)
Parashak, Paul M., 5203 Chippewa St. (9)
Parato, John M., 1010 McCausland Ave. (17)
Pareira, Morton D., 743 Yale Ave. (5)
Parker, Thomas W., 605 Clara Ave. (12)
Parker, William, 807 Carleton Bldg. (1)
Parsons, Ernest H., 457 N. Kingshighway Blvd. (8)
Passanante, Bartholomew M., 306 Humboldt Medical Bldg. (3)
Patton, John F., Fitzsimons Army Hosp., Box 6082, Denver, Colo.
Patton, Leslie E., 701 Beaumont Medical Bldg. (8)
Payne, Meredith Jorstad, 1515 Lafayette Ave. (4)
Payne, Richard J., 718 University Club Bldg. (3)
Peartree, Sherwood P., 1515 Lafayette Ave. (4)
Peden, Burnet W., 35 N. Central Ave. (5)
Peden, Joseph C., 1015 Missouri Theatre Bldg. (3)
Peden, Joseph C., Jr., 457 N. Kingshighway Blvd. (8)
Peeler, James O., 2505 N. Florissant (6)
Pelz, Mort D., 304 University Club Bldg. (3)
Penney, David L., 316 Wall Bldg. (8)
Pennington, F. Eugene, 27 Log Cabin Dr. (17)
Pennoyer, James, 457 N. Kingshighway Blvd. (8)
Pernoud, F. G., Jr., 706 Missouri Theatre Bldg. (3)
Pernoud, Michael F., 706 Missouri Theatre Bldg. (3)
Peters, Augustus W., 4145a S. Grand Blvd. (18)
Peugnet, Hubert B., 512 Beaumont Medical Bldg. (8)
Pfeifer, Oliver C., 4523 S. Kingshighway Blvd. (9)
Pfeiffenberger, Mather, Jr., 463 Bluff St., Alton, Ill.
Phelan, Emma, Rte. No. 2, Kimmswick
Pickrell, Claude D., 406 Frisco Bldg. (1)
Piekarski, Anthony A., 1525a Cass Ave. (6)
Pieper, Henry G., 3456 Gravois Ave. (18)
Pitzman, Marsh, 6 Kingsbury Pl. (12)
Plag, Albert F., 3150 Morganford Rd. (16)
Platt, William R., 919 N. Taylor Ave. (8)
Plesons, John D., 3632 Bates St. (16)
Ploehn, Emma, 2728 Geyer Ave. (4)
Plumpe, Tupper, 3933 S. Grand Blvd. (18)
Pollack, Max, 311 Metropolitan Bldg. (3)
Pollock, Ellis L., 3958 Arsenal St. (16)
Popovich, Paul J., 6102 Oakland Ave. (10)
Portuondo, Bonaventura C., 3532 Flora Ct. (4)
Post, Lawrence T., 524 Metropolitan Bldg. (3)
Post, M. Hayward, 524 Metropolitan Bldg. (3)
Potashnick, Robert, 824 Metropolitan Bldg. (3)
Pote, Thomas B., 4925 Parkview Pl. (10)
Potter, Allen B., 5203 Chippewa St. (9)
Powell, Carl A., 3643 Washington Ave. (8)
Powell, Earl A., 729 Frisco Bldg. (1)
Powell, Rudolph V., 512 Beaumont Medical Bldg. (8)
Powers, Pierce W., 1106 Missouri Theatre Bldg. (3)
Pranger, Sylvester H., 4952 Maryland Ave. (8)
Presnell, Cleitus A., 630 Missouri Theatre Bldg. (3)
Press, Maurice J., 7508 York Dr. (5)
Probstein, Jacob G., 108 Lister Bldg. (8)
Proetz, Arthur W., 1002 Beaumont Medical Bldg. (8)
Pruett, Burchard S., 6006 Virginia Ave. (11)
Pruett, Hubert S., 2739 N. Grand Blvd. (6)
Puckett, Cordelia A., 69 Crestwood Dr. (5)
Pulliam, M. J., 618 University Club Bldg. (3)
Purcell, Harry K., 4660 Maryland Ave. (8)
Pyne, Herbert S., 2752a Cherokee St. (18)
Quinn, Abram T., 6917 Fyler Ave. (9)
Quirin, Warren S., 2621 S. Jefferson Ave. (18)
Raemdonck, Alphonse J., 4390 West Pine Blvd. (8)
Ramos, Raoul L., U.S.V.A. Hospital, Poplar Bluff
Rawlins, Fred E., 1515 Lafayette Ave. (4)
Ray, Richard H., 1010 McCausland Ave. (17)
Ready, James H., R.R. 2, Shackleford R., Florissant
Regan, William W., 7803 Hillview Ave., Richmond, Va.
Reh, Edward P., 311 Pasteur Medical Bldg. (8)
Reich, Harry A., 6230 Devonshire Ave. (9)
Reichert, M. Cecelia, 5209 Nottingham Ave. (9)
Reiches, Aaron J., 115 Lister Bldg. (8)
Reid, William F., 110 E. Leigh St., Richmond, Va. (19)
Reilly, Leo J., 730 Hodiamont Ave. (12)
Reineck, John A., 2301 S. Kingshighway Blvd. (10)
Reis, Carl J., 18 S. Kingshighway Blvd. (8)
Rendleman, George F., 933 Arcade Bldg. (1)
Repetto, Albert M., 405 University Club Bldg. (3)
Repp, Theodore J., 5535 Delmar Blvd. (12)
Resnikoff, Lewis E., 3612 S. Jefferson Ave. (18)
Reuter, Louis A., 2625a N. 9th St. (6)
Reynolds, Fred C., 4952 Maryland Ave. (8)
Rice, Earl R., 611 Olive St. (1)
Richman, Elmer, 1034 Missouri Theatre Bldg. (3)
Ries, Douglas A., 635 Missouri Theatre Bldg. (3)
Rifkin, Shale M., 1515 Lafayette Ave. (4)
Riggio, Salvatore N., 2617 S. Kingshighway Blvd. (9)
Riley, Ralph D., 1134 Missouri Theatre Bldg. (3)
Riley, William H., 4660 Maryland Ave. (8)
Ringo, Henry J., 833 Missouri Theatre Bldg. (3)
Riordan, Lawrence M., 320 Lister Bldg. (8)
Ritchie, Frances R., 5233 Waterman Ave. (8)
Ritter, Hubert A., 208 S. 5th St., St. Charles
Roberts, Harold K., 110 S. Central Ave. (5)
Robertson, Frank G., 833 Missouri Theater Bldg. (3)
Robertson, LeRoy L., 340 Beaumont Medical Bldg. (8)
Robins, Eli, 600 S. Kingshighway Blvd. (10)
Roche, Maurice B., 226 Beaumont Medical Bldg. (8)
Roe, Allen N., 4539 Queens Ave. (15)
Rohlfing, Walter H., 4724 Gravois Ave. (16)
Romendick, Samuel S., 107 Lutes Circle, Van Horne Park, Fort Bliss, Texas
Rose, Dalton K., 316 Beaumont Medical Bldg. (8)
Rosen, Charles S., 412 Humboldt Medical Bldg. (3)
Rosenbaum, Harry D., 840 Beaumont Medical Bldg. (8)
Rosenberg, Meyer B., Box 47, Wm. Beaumont Army Hosp., El Paso, Texas
Rosenfeld, Henry, 618 Wall Bldg. (8)
Rosenfeld, Herman J., 621 Wall Bldg. (8)
Ross, Charles M., 1612 Cajon Place, Coronado, Calif.
Roth, John J., 1020 Missouri Theatre Bldg. (3)
Rothman, David, 4652 Maryland Ave. (8)
Rothman, Paul M., 3103 Shenandoah Ave. (4)
Rothweiler, Robert, 4161 Lindell Blvd. (8)
Rotter, Julius C., 2603 Cherokee St. (18)
Roulhac, George E., 530 Beaumont Medical Bldg. (8)
Royce, Robert K., 316 Beaumont Medical Bldg. (8)
Royston, G. D., Rte. No. 3, Hope, Ark.
Ruddell, George W., 1259 N. Kingshighway Blvd. (13)
Rudi, Herbert J., 3532 Gravois Ave. (18)
Ruhling, Rudy, 5203 Chippewa St. (9)
Rund, Emmet H., 5417 S. Grand Blvd. (11)
Ryan, Linus M., 515 Wall Bldg. (8)
Ryan, Robert E., 540 Beaumont Medical Bldg. (8)
Sachar, Leo A., 457 N. Kingshighway Blvd. (8)
Sachs, Ernest, 333 Cedar St., New Haven, Conn. (11)
St. John, Dewey, 833 Metropolitan Bldg. (3)
St. John, Thomas C., 832 Metropolitan Bldg. (3)
Sale, Llewellyn, 108 Lister Bldg. (8)
Sale, Llewellyn, Jr., 108 Lister Bldg. (8)
Sanders, Robert D., 1502 Cass Ave. (6)
Sanders, Theodore E., 840 Beaumont Medical Bldg. (8)
Sanford, Joseph Hoy, 401 Beaumont Medical Bldg. (8)
Sante, L. R., 606 Missouri Theatre Bldg. (3)
Sargent, Frederich K., 6430 Hampton Ave. (9)
Saslow, George, 325 Westgate Ave. (5)
Sassin, Edmond F., 324 Frisco Bldg. (1)
Sato, George, 2500th Medical Group, Mitchel Air Force Base, N. Y.
Satterfield, Val B., 415 Lister Bldg. (8)
Sauer, F. J. Dean, 106 S. Central Ave. (5)
Sauer, W. Nicholas, 218 Beaumont Medical Bldg. (8)
Sauer, William E., 218 Beaumont Medical Bldg. (8)
Sausville, Albert J., 8321 N. Broadway (15)
Saxton, John A., Jr., 1430 Carroll St. (4)
Schaper, Ernest H., 9079 Wrenwood Lane (17)
Schechter, Samuel E., 537 Missouri Theater Bldg. (3)
Scheer, George E., 634 N. Grand Blvd. (3)
Scheff, Harold, 457 N. Kingshighway Blvd. (8)
Scherman, Victor E., 830 Beaumont Medical Bldg. (8)
Schiele, Herbert S., Jr., 6023 Waterman Ave. (12)
Schierman, William D., 6354 Pershing Ave. (5)
Schlenker, John L., 5400 Arsenal St. (9)
Schlenker, Lawrence, 3515 S. Grand Blvd. (18)
Schlossstein, Adolph G., 3438 Russell Blvd. (4)
Schlueter, Newell W., 634 N. Grand Blvd. (3)
Schlueter, Robert E., 3839 Lindell Blvd. (8)
Schmidt, Edwin H., 9244 Coral Dr. (23)
Schmiemeier, Herman A., 6811a Gravois Ave. (16)
Schmiemeier, Roy H., Rte. No. 14, Box 1039 (23)
Schmitz, Edgar F., 219 Harrison Ave. (21)
Schneider, Richard F., 4580 Scott Ave. (10)
Schnoebelen, Paul C., 101 Pasteur Medical Bldg. (8)
Scholz, Roy P., 620 Metropolitan Bldg. (3)
Schrepel, Herbert O., 614 Missouri Theatre Bldg. (3)
Schroeder, Henry A., 640 S. Kingshighway Blvd. (10)
Schuchat, W. Louis, 3866 Flora Pl. (10)
Schuck, Philip, 1703 S. Grand Blvd. (4)
Schwartz, Frederick O., 727 Metropolitan Bldg. (3)
Schwartz, Henry G., 600 S. Kingshighway Blvd. (10)
Schweiss, John F., 104 New River Dr., Jacksonville, N. C.
Sciortino, Gaspare, 5501a St. Louis Ave. (20)
Sciortino, John S., 801 Beaumont Medical Bldg. (8)
Scopelite, Joseph A., 3718 N. Grand Blvd. (7)
Scott, Elwin P., 3258 Lafayette Ave. (4)
Scott, Wendell G., 4952 Maryland Ave. (8)
Seabold, John A., 1006 Carleton Bldg. (1)
Seaman, William B., 510 S. Kingshighway Blvd. (10)
Seddon, John W., 4500 West Pine Blvd. (8)
Seib, George A., 2323 Lafayette Ave. (4)

Senturia, Ben H., 500 N. Skinker Blvd. (5)
Senturia, Hyman R., 112 Pasteur Medical Bldg. (8)
Serkes, Kenneth D., Jewish Hospital (10)
Sertl, John D., 2840a California Ave,. (18)
Sevin, Omar R., 4952 Maryland Ave. (8)
Sewing, Arthur H., 2342 St. Louis Ave. (6)
Sexton, Daniel L., 937 University Club Bldg. (3)
Sexton, Elmer E., 909 Arcade Bldg. (1)
Shackelford, Horace H., 504 Wall Bldg. (8)
Shahan, Philip T., 524 Metropolitan Bldg. (3)
Shahan, William E., 524 Metropolitan Bldg. (3)
Shaner, John F., 912 Beaumont Medical Bldg. (8)
Shapleigh, John B., 7030 Maryland Ave. (5)
Sharp, Austin R., 6000 W. Florissant Ave. (20)
Sheedy, John A., 301 Logan Blvd., Altoona, Pa.
Sheets, John S., 2500 S. Kingshighway Blvd. (10)
Sheets, Martin E., 4329 Manchester Ave. (10)
Sherard, Julius C., 2702a Franklin Ave. (6)
Sheridan, Edmund R., 16 Hampton Village Plaza (9)
Sherman, Alfred I., 630 S. Kingshighway Blvd. (10)
Sherwin, Charles S., 801 Beaumont Medical Bldg. (8)
Shoulders, Harrison H., Jr., 5843 Cabanne Ave. (12)
Shrader, E. Lee, 415 Beaumont Medical Bldg. (8)
Shreffler, A. R., Box 138, Tavernier, Fla.
Shutt, Cleveland H., 220 N. 4th St. (2)
Siddall, H. Stewart, 41 E. Main St., New London, Ohio
Siebert, Walter J., 3 Oakleigh Lane (5)
Siesener, Herbert H., Maria Medical Center, 6000 W. Florissant (20)
Sievers, Edward F., 635 Midland Ave. (5)
Signorelli, Andrew J., 2801 N. Taylor Ave. (15)
Silvermintz, Saul D., 626 Metropolitan Bldg. (3)
Simon, David L., 5535a Cabanne Ave. (12)
Simon, Jerome I., 830 Beaumont Medical Bldg. (8)
Simon, Selig, 4475 West Pine Blvd. (8)
Simpson, Eber, 3739 Gravois Ave. (16)
Simpson, Guy, 1206 Missouri Theatre Bldg. (3)
Sinkler, William H., 4503a Page Blvd. (13)
Sinner, Bernard L., 16 Hampton Village Plaza (9)
Sisson, Richard G., 4652 Maryland Ave. (8)
Skeffington, Mary J., 3615 Olive St. (8)
Smiley, William, 4105a Easton Ave. (13)
Smith, B. F., Jr., 340 Beaumont Medical Bldg. (8)
Smith, Frank John, 4930 Lindell Blvd. (8)
Smith, Garland F., 418 Beaumont Medical Bldg. (8)
Smith, Herbert P., 5205a Chippewa St. (9)
Smith, Hugh R., 430 University Club Bldg. (3)
Smith, J. Earl, 4450 Westminster Pl. (8)
Smith, John R., Barnes Hospital (10)
Smith, Kathleen, 640 S. Kingshighway Blvd. (10)
Smith, Milton, 830 Beaumont Medical Bldg. (8)
Smith, Robert M., 114 N. Taylor Ave. (8)
Smith, Robert S., 3977 Wilmington (16)
Smolik, Edmund A., 422 Beaumont Medical Bldg. (8)
Snyder, Edward N., 705 Olive St. (1)
Sommer, Conrad S., 453 N. Taylor Ave. (8)
Soule, Samuel D., 108 Lister Bldg. (8)
Spain, Kate C., 5321 Savoy Ct. (12)
Spaulding, Robert W., 305 Scott Ave., Van Horne Park, Ft. Bliss, Texas
Spencer, Selden, 718 University Club Bldg. (3)
Spinzig, Edgar W., 5 Hawbrook Lane (22)
Spivy, Raymond M., 502 Beaumont Medical Bldg. (8)
Spoeneman, Walter H., 1515 St. Louis Ave. (6)
Stahl, P. D., 301 Pasteur Medical Bldg. (8)
Stanton, Mearl F., 1402 S. Grand Blvd. (4)
Stanze, Frank J., 3924 S. Grand Blvd. (18)
Staples, Daniel E., 418 E. 11th St., Rolla
Starkloff, Gene B., 929 University Club Bldg. (3)
Starkloff, Max, 512 Dover Pl. (11)
Stearns, Colby S., 6407th U.S.A.F. Hosp., A.P.O. 323 c/o P.M., San Francisco, Calif.
Stecker, George, 617 Missouri Theatre Bldg. (3)
Steele, Jack T., 40 N. Florissant Ave. (21)
Stein, Arthur W., 3606 Gravois Ave. (16)
Steinberg, Franz U., 211 Pasteur Medical Bldg. (8)
Steiner, Albert S., 308 N. 6th St. (1)
Stephens, LeRoy J., 218 Sylvester Ave. (19)
Stephens, Louis F., Rte. No. 9, Box 221, Cliff Cave Rd. (23)
Stephenson, Hugh E., Jr., Dept. of Surgery, Univ. of Missouri School of Medicine, Columbia
Stevens, Robert W., 1222 Missouri Theatre Bldg. (3)
Stevenson, Alan J., MacDill Air Force Base Hosp., Tampa, Fla. (2)
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Stewart, John W., 4660 Maryland Ave. (8)
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Stock, Albert E., 1506 N. Prospect Ave., Colorado Springs, Colo.
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Stone, Charles A., 912 Beaumont Medical Bldg. (8)
Stone, Edna M., 4916 Odell Ave. (9)
Strauss, Arthur E., 601 Humboldt Medical Bldg. (3)
Striegel, B. F., 1875 Madison St. (6)
Strub, Giles J., U.S.A.F. Hospital, Nellies A.F.B., Nevada
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Stude, William C., 16 Hampton Village Plaza (9)
Stutsman, Albert C., 640 Beaumont Medical Bldg. (8)
Styblo, Clarence J., Address Unknown
Sudholt, Alfred F., Jr., 457 N. Kingshighway Blvd. (8)
Sullivan, Clement J., 4161 Lindell Blvd. (8)
Summers, John B., 4730 Prague Ave. (9)
Summers, Thomas F., 2000 S. Broadway (4)
Sunderman, Raymond C., 4943 Natural Bridge Ave. (15)
Susanka, William D., 10061 Lakeside Dr. (23)
Sutherland, John C., 600 S. Kingshighway Blvd. (10)
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Sweet, Herbert C., 5616 Maxwell Ave. (23)
Swekosky, Frank J., 2528 S. Jefferson Ave. (4)
Talbott, Hudson, 6525 Gardner Lane (21)
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Tate, Lloyd L., 901 Washington Ave. (1)
Taussig, Barrett L., 316 Lister Bldg. (8)
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Todd, D. Clay, 4140 Forest Park Ave. (8)
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Torin, Bernice A., 310 Pasteur Medical Bldg. (8)
Tremain, I. G., 4254 Flora Blvd. (10)
Trigg, Joseph F., 233 Metropolitan Bldg. (3)
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Uhlemeyer, Henry A., Jr., 5203 Chippewa St. (9)
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Walker, Willard B., Address Unknown
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Webb, Paul K., 1508 Chemical Bldg. (1)

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Welch, Hooper W., 630 Missouri Theatre Bldg. (3)
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White, W. H., Jr., 110 S. Central Ave. (5)
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Williams, Edward B., Jr., 4242 Easton Ave. (13)
Williams, Ray D., 114 N. Taylor Ave. (8)
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Wilson, Keith S., 4952 Maryland Ave. (8)
Wilson, Kenneth O., 1259 N. Kingshighway Blvd. (13)
Wilucki, Leo E., 5402a Gravois Ave. (16)
Wilucki, Melvin R., 8916 Gravois Ave. (16)
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Winkler, L. F., 8372 Fullerton Ave. (14)
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Woolf, Ralph B., 630 S. Kingshighway Blvd. (10)
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Woolsey, Robert D., 16 Hampton Village Plaza (9)
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Zentay, Paul J., 8515 Delmar Blvd. (24)
Ziegelmeyer, John S., 3733 Lindell Blvd. (8)
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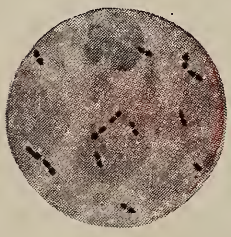
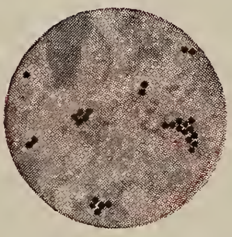
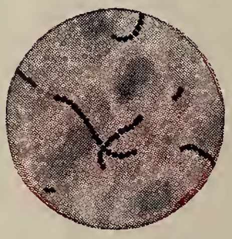
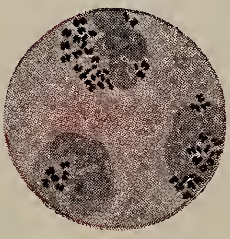
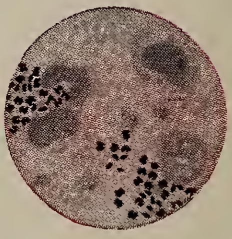

Pneumococci


Staphylococci


Beta Hemolytic Streptococci


Gonococci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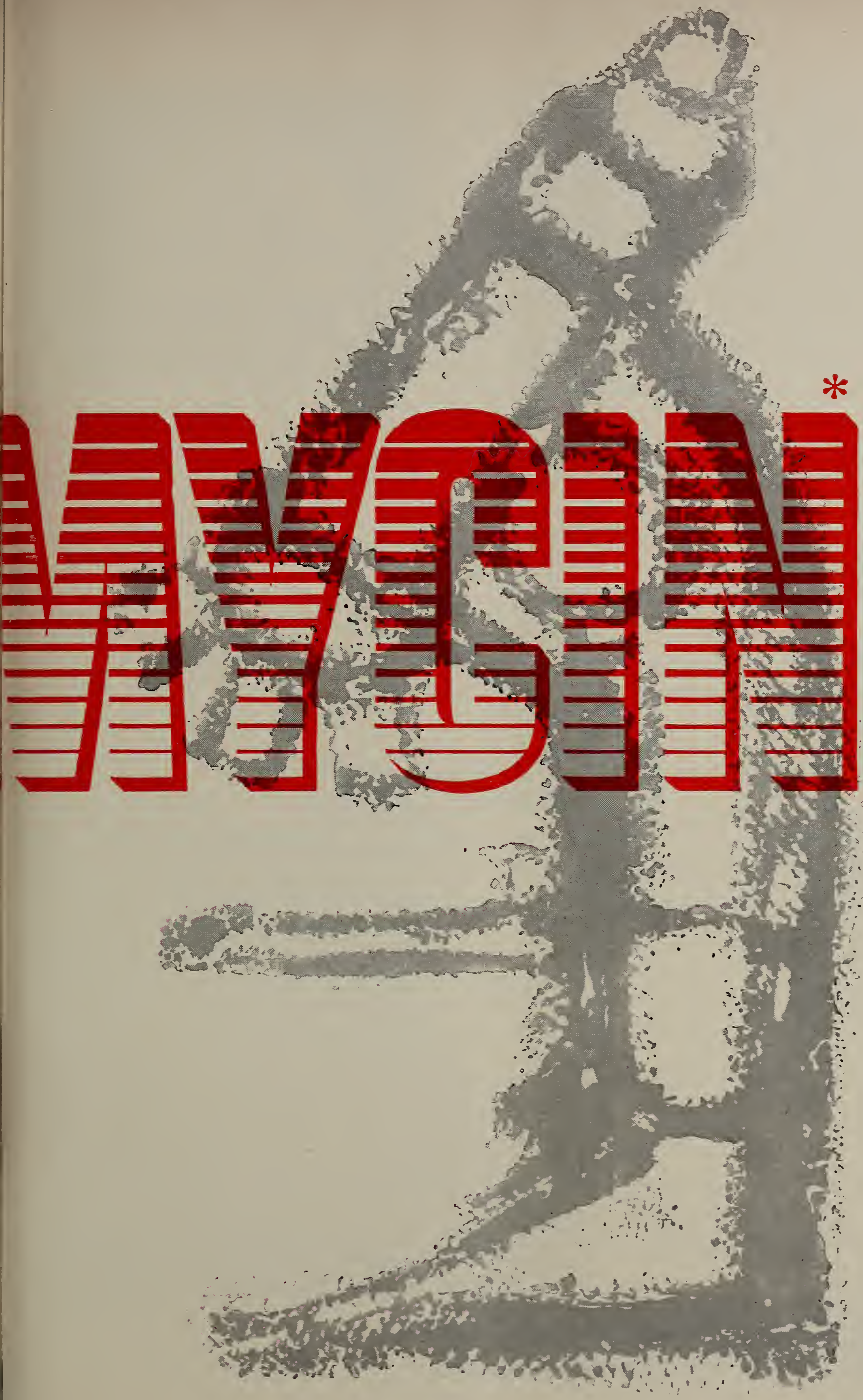
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McCaughan, John M., 505 Humboldt Bldg.
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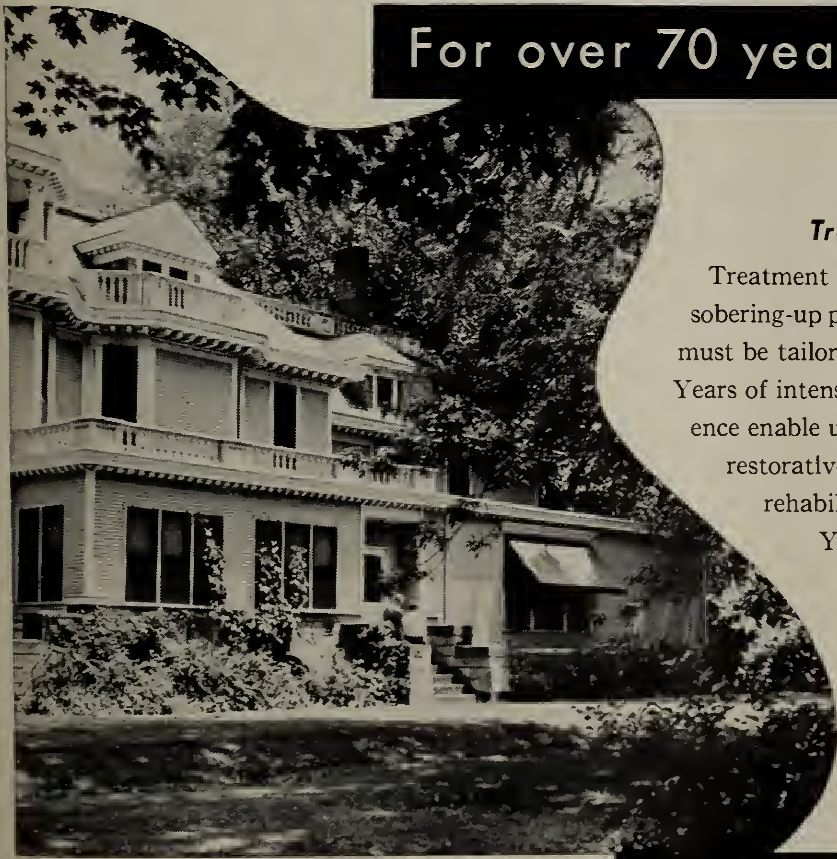

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Book Reviews

Rheumatic Diseases. Diagnosis and Treatment, by Eugene F. Traut, M.D., Associate (Rush) Clinical Professor of Medicine, University of Illinois; Attending Physician to the Cook County Hospital and to the West Suburban Hospital, Oak Park, Illinois. With 192 Illustrations. St. Louis. C. V. Mosby Company. 1952. Price $20.00.

This volume offers, as the author states, a discussion of "some conditions causing pain or disability in the motor or supporting parts of the body, entities included only because of skeletal (rheumatic) pain." A great variety of conditions are discussed including separate chapters on the various collagen diseases, osteoporosis, disorders of intervertebral disks, pain about the shoulder, the hand-shoulder syndrome, psoriasis and arthritis and Reiter's disease.

The classification followed is that of the American Rheumatism Association. Pathology is well presented and manifestations of the skin and eye are fully discussed. Treatment deservedly receives a large portion of this text, there being fourteen chapter devoted to it. Many therapies previously empolyed and those in current use, but of doubtful value, are considered and evaluated. General measures, diet, gold therapy, ACTH and adrenal corticoids, physical medicine, surgical and roentgen therapy are discussed in detail.

Illustrations while not numerous are certainly adequate. Photomicrographs and roentgenograms are well reproduced.

This text which is clearly written, presents a wealth of detail and should prove to be a valuable reference to many physicians. It should be especially well received by internists and others who are particularly interested in these many diseases. It is a needed addition to the few available texts on rheumatic diseases.

V. B. B.

Modern Concepts in Medicine by Julius Jensen, St. Louis. Illustrated. C. V. Mosby Company, St. Louis, 1953. Price $11.50.

It is obvious that today a person would not write a textbook of medicine unless the viewpoint was completely original and drew the physician's perspective into a newer and more useful channel. This book is written in such a fashion. The style, not only the title, is new. The author warns the reader that the book is not a finished product. The cliché, "that we are in a state of rapid development," is an obvious subdued understatement.

The arrangement begins with an overture entitled, "A functional approach to an integrated concept of medicine." The author develops the physiologic bases of medicine. The material is arranged to show its vitality to the understanding of medicine and goes far beyond the practical aspects so many textbooks attempt to array. A listing of provocative headings are development of modern medical concepts, cellular activity, and the principle of adaptation. Subheadings are metabolism, fluid balance, electrolyte balance, hydrogen-ion concentration, regulation of temperature, immune-reaction and neoplasia. Under structural facilities in support of adaptive processes the first section is devoted to the early metabolism of the gastro-intestinal tract. Intermediary metabolism emphasizes the liver and, under final stages of metabolism, the kidney, locomotor facilities, structural responses to the immune reaction, related stresses and the transportation system. The final section is on cybernetics, the science of communication, an important but relatively new and underdeveloped field which is discussed for the first time in a medical textbook. This newer concept in medicine believes that all fields of science should be correlated. Mathematical bases are implied to medical science as a whole, as first suggested by Dr. Norbert Wiener of M.I.T. The Josiah Macy Foundation has aided in the development of this field of thinking, as applied to medicine.

The perusal of this book should help all physicians to shake loose of the status quo. Here is a guide in the blind groping through the welter of facts so rapidly being unfolded by today's scientific methods.

L. G.

Synovial Fluid Changes in Joint Disease, by Marian W. Ropes, M.D., Associate Physician, Massachusetts General Hospital; Assistant Clinical Professor of Medicine, Harvard Medical School; and Walter Bauer, M.D., Chief of Medical Services, Massachusetts General Hospital; Jackson Professor of Clinical Medicine and Director of Robert W. Lovett Memorial Foundation for the Study of Crippling Disease, Harvard Medical School. Published for The Commonwealth Fund by Harvard University Press, Cambridge, Massachusetts. 1953. Price $4.00.

This is a small book with 150 pages, of buckram, well printed, with fifteen figures and fourteen tables, consisting of seven chapters, extensive bibliography, of 213 references and a large report chart tabulating the statistical findings in the study.

The work and publication was sponsored by the Commonwealth Fund.

Chapter I is devoted mostly to the chemistry and histology of normal joint fluids. Chapter II gives the various types of the disease and variations in the cytology according to the duration of the joint effusions; also the variation in the positive and negative cultures. Chapter III discusses the traumatic origin of the increase in joint fluid, Chapter IV the variety of diseases including gout, rheumatism, fever abnormalities of the blood and vitamin deficiencies of neoplasms, Chapter V the changes in rheumatoid arthritis and diseases of tuberculous origin. In Chapter VI the authors discuss the value of joint aspiration with special attention to differential diagnosis. The final chapter is an evaluation of joint fluid and conclusions to be drawn therefrom.

It is an interesting treatise, rather ultra-scientific, not easy reading to one unless he be of a more than ordinarily inquiring nature.

C. A. S.

The Fight Against Tuberculosis, An Autobiography by Francis Marison Pottenger, Printed by Henry Schuman, New York. Price $4.00.

One of the valued things Doctor Pottenger contributed to medicine was his intense development of a technic for the palpation of the chest.

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L. S.

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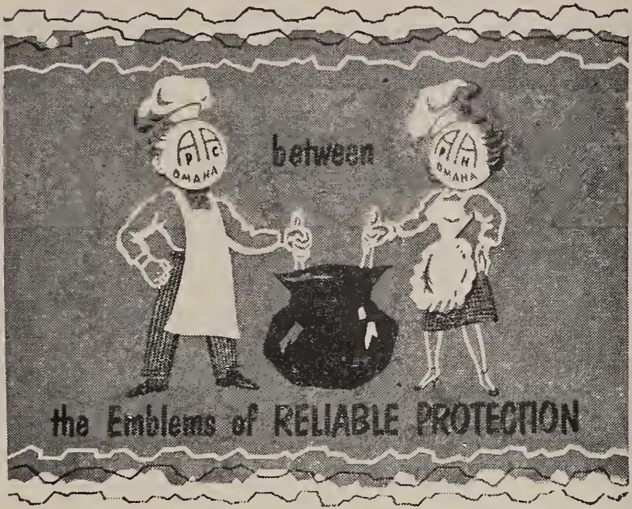
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  Surgery of Colon & Rectum, One Week, Sept. 13
  Basic Principles in General Surgery, Two Weeks, September 20
  Breast & Thyroid Surgery, One Week, October 25
  Thoracic Surgery, One Week, October 11
  Esophageal Surgery, One Week, October 4
  General Surgery, Two Weeks, October 4, One Week, October 4
  Gallbladder Surgery, Ten Hours, October 25
  Fractures & Traumatic Surgery, Two Weeks, October 25
GYNECOLOGY—Office & Operative Gynecology, Two Weeks, September 20
  Vaginal Approach to Pelvic Surgery, One Week, September 13
OBSTETRICS—General & Surgical Obstetrics, Two Weeks, October 4
MEDICINE—Two-Week Course September 27
  Electrocardiography & Heart Disease, Two Weeks, October 11
  Gastroenterology, Two Weeks, October 25
  Gastroscopy, One Week, September 13
RADIOLOGY—Diagnostic Course, Two Weeks, Oct. 4
  Clinical Uses of Radio Isotopes, Two Weeks, Oct. 4
PEDIATRICS—Clinical Course, Two Weeks, by appointment
  Congenital & Rheumatic Heart Disease in Infants & Children, One Week, October 11 and October 18
  Two Weeks, October 11
UROLOGY—Two-Week Urology Course, September 20
  Ten-Day Practical Course in Cystoscopy every two weeks

Teaching Faculty—Attending Staff of Cook Co. Hospital

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Curiosa et Trivia

William B. McCunniff, M.D.

Of approximately two million workers absent from their jobs every day due to sickness or injury, 30 per cent are due to emotional disorders, 60 per cent are due to common illnesses and nonindustrial injuries, only 10 per cent are due to a job accident or illness.

Fourth of July fireworks resulted in 466 deaths in 1903.

There is one government worker (using the term loosely) for every twenty persons in the United States.

Possibly efficient, but certainly not tidy: the body heat of domestic animals may be utilized to heat a dwelling . . . a cow, for instance, gives off 3,500 B.T.U.'s per hour.

A synthetic vitamin K, Menadione, when fed to cows, keeps milk from souring as much as four times longer.

At Louisville, Kentucky, last year, a C-46 crashed with 43 persons on board, and about one half died. *Not one* of the cases taken to the hospital had had a splint of any kind applied, although every one of those who died, and of those who lived, had multiple fractures. (Who needs disaster instruction?)

Reduction of apocrine gland sweating cannot be accomplished merely by use of pastes, since the glands will secrete against an external pressure of 225 mm. Hg.

Americans annually spend nearly $800 million on funerals and burial services, over $200 million on cemeteries and crematories, and over $200 million on monuments and tombstones.

Fish packed in flake ice containing one part aureomycin per million parts of ice stay fresh longer.

Dilaudid hydrochloride

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COUNCIL ACCEPTED

Dilaudid
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Powerful opiate analgesic - dose, 1/32 grain to 1/20 grain.

Potent cough sedative - dose, 1/128 grain to 1/64 grain.

Readily soluble, quick acting.

Side effects, such as nausea and constipation, seem less likely to occur.

An opiate, has addictive properties.

Dependable for relief of pain and cough, not administered for hypnosis.

● Dilaudid is subject to Federal narcotic regulations. Dilaudid, Trade Mark Bilhuber.

Bilhuber-Knoll Corp. Orange, N. J.

Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-05 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Guest Editorial

How Bright Is Our Light?

Carl B. Hyatt, Jr., *Director, Public Safety, Asheville, N. C.*

At some time in life, each of us comes to a time when we stop and think back on what we have accomplished, and at the same time become aware of the things we have not done.

It is natural for us to want to live the kind of lives that will leave a mark in our communities long after we are gone. We would like to have some kind of lasting memorial indicating we have not lived in vain.

These lasting memorials are not built by accumulating wealth, nor through social or public prominence—they are built through service.

Too frequently in these days of uncertainty, we find people becoming submerged in despair, and giving in to a spirit of defeatism.

Our hope for the future lies in individual Americans having a faith that they can build a better community or nation.

If we were to analyze the factors involved in some of the countries of the world that have turned to Communism, I think we would find that the primary reason was not that the majority of the people wanted Communism, but that the majority of the people lacked the will to work for the things in life they really wanted. They just sat around to be swept away with the tide.

America will be only as strong as its individual citizens make it. Each of us, whether we be doctor or lawyer, business man or clerk, or whatever our role may be, has a responsibility to help build a stronger and greater nation.

There is a story that is told about a lighthouse along the coast of New England. Within that light, there are 1,600 pieces of glass so perfectly set with relation to each other that they cause the light to shine forty miles out to sea. There is no special wick, no high powered lens—just an ordinary wick, an ordinary lens, and 1,600 pieces of glass working together.

That light establishes a formula that we might well follow. If all of us will recognize that our responsibilities of life go beyond our own personal realm, and if we all work together fulfilling those responsibilities, then we can cause the light of our nation to shine brightly in the years to come. At the same time we will know that we are building memorials that will indicate our living has not been in vain.

Of This and That

Mark M. Marks, M.D.

It is a good thing to learn by listening. A few gifted people can think constructively while talking. Suffice it for the rest of us to be able to cogitate without our own verbal interference.

Listening is more than being receptive through hearing. One can learn to listen through all the senses. As there is intensity in catching sound, so can the eyes, ears, nose and touch, even the innermost awareness (called Soul) be taught understanding.

When one sense is lost, the others sharpen their acumen. Neglect one and the others lessen in ability. There is an awakening, when one learns to listen.

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Missouri Academy of General Practice

William G. Shaw, M.D.

The general practitioner in Missouri, since the advent of the hydrogen bomb, has been made responsible for a more active part in civil defense.

A committee appointed by the Missouri State Medical Association president in 1950 labored diligently to perfect a plan of civil defense with emphasis on the care of casualties in the bombed city. The medical profession in rural Missouri and non-disaster cities was to be transported in an orderly manner to the stricken city. The magnitude of the destruction anticipated by explosion of the much more devastating hydrogen bomb shifted the emphasis from local care of casualties to massive evacuation of the target city.

Due to the careful planning and foresight of the leaders of the medical civil defense committee, Drs. Curt Lohr, St. Louis, and Carroll Hungate, Kansas City, Missouri has not assumed the pessimistic attitude of futility seen in some parts of this country and England. Since perfection of the H-bomb the Missouri medical plan was altered only to evacuate casualties from the target city to rural Missouri by the same mobile units that had been organized to carry medical personnel to the disaster city.

To accomplish an orderly evacuation with the best care available for casualties the medical civil defense plan in Missouri has now organized a civil defense team in every Councilor District in the state. These districts roughly follow the lines bounding the state highway patrol districts. Each Councilor District supervises the organization of a similar, though smaller and less complete, defense unit in every county in that district. Every doctor and member of ancillary medical organizations have been included in the survey that has been made to determine the personnel available to contribute to the medical care, welfare and shelter of the stricken people evacuated from a bombed city.

With school houses used as focal points for civil defense activities in cities, towns and rural areas, upon the rural Missouri general practitioner falls the medical responsibility for training and recruiting para-medical personnel. The success of civil defense in the state will be in direct proportion to the active participation and conscientious planning of Missouri doctors. The cooperation already pledged is evidence that the general practitioner realizes that, "Civil Defense Is Everyone's Business."

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Last week Ray McIntyre stopped by on some business and when it was finished we got to shooting the bull and he asked me a question that I had never given much thought to before. It was "What is your biggest problem in practicing medicine?" I gave him some sort of an answer off hand and then on the way home got to thinking.

When I got it all boiled down I had actually three big problems the way I looked at it. They are: 1. Just practicing medicine, 2. people rushing me, 3. being used as a convenience and/or taken for granted.

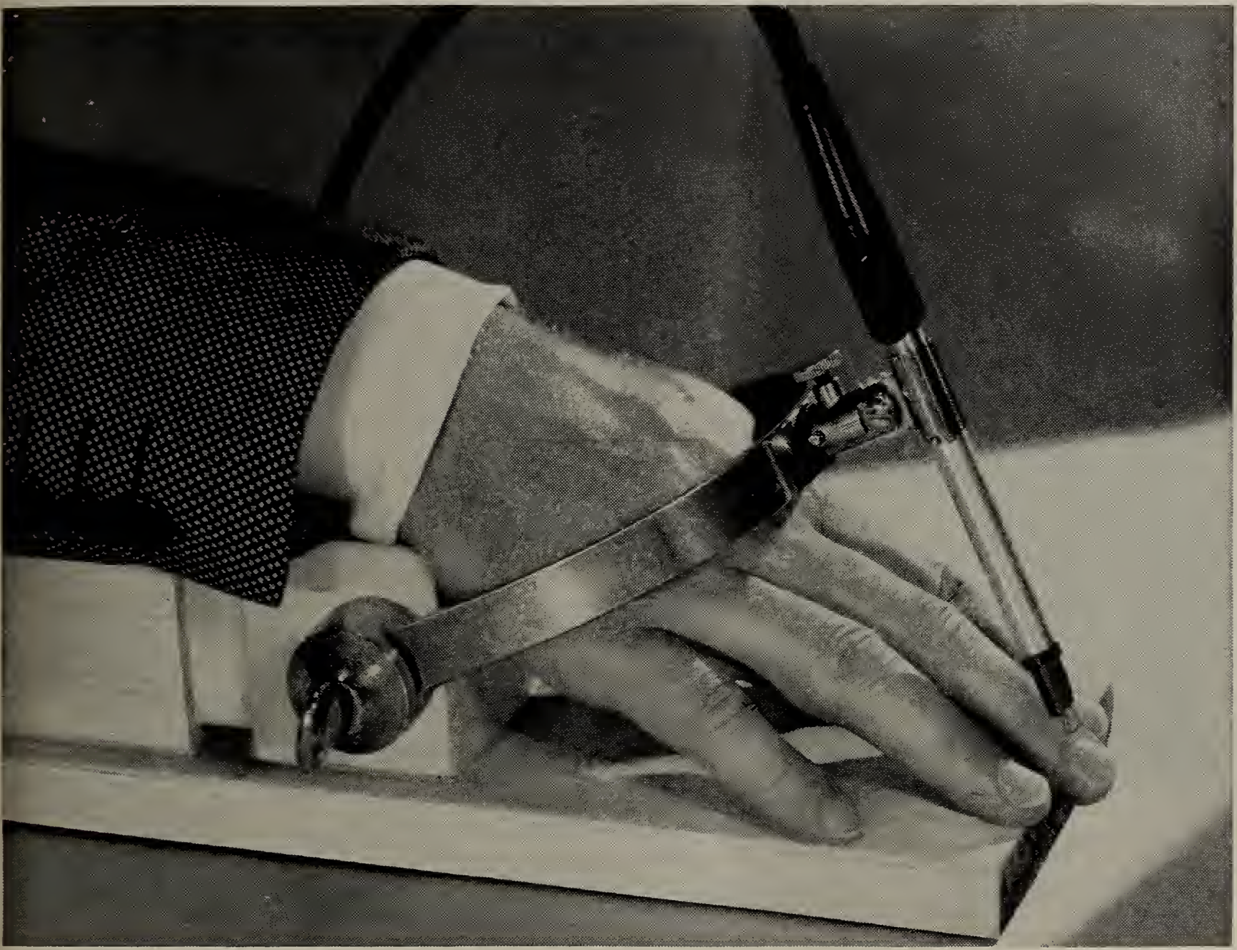
Now it may seem a bit facetious to say that practicing medicine is my biggest problem but it actually is. That is if I want to be sure I am doing a good job. Don't think anyone would deny the fact that it is a full time job. The longer I am away from medical school and its book learning the more convinced I am of how little I know about the subject. I try to put down a diagnosis on every patient's record and it is positively amazing to me sometimes to be so sure that I have made a hot diagnosis then have time and old Mother Nature prove me so wrong. I am honest enough with myself to give the old girl, or the Good Lord, a heck of a lot of credit and to be thankful that she, or They, are often on my side.

When I get pushed I get the belly ache and the diarrhea. Once I got real worried and the Missus made me go see Max Berry who really straightened me out on that. Besides that I just can't do a good job when I hurry. This I try to explain to my patients when they start grumbling too much or giving me dirty looks. There is all too often the problem of grandma who has been sick or feeling bad for two weeks and has been meaning to come in to the office. But suddenly, at 2 p.m. when the office is packed, it becomes an emergency and can't I come out to see her right now. This is when knowing grandma comes to good use and often I have known her all my life. A few questions and a little explanation will frequently suffice for a couple of hours.

Besides that I aims to see the year 2,000 roll around and expects to have all my faculties about me to enjoy it. If I am under pressure all the time I just might develop a coronary and end up well pickled at the time. When I feels all keyed up I read a bit of Sir William's *"Aequanimitas"* and try to maintain a perpetual state of THAT. For the

(Continued on page 698)

Physiological test compares Kent's "Micronite" Filter with other cigarette filters



To compare the efficiency of various filters as they affect physiological responses in the cigarette smoker, drop in surface skin temperature at the last phalanx was measured.

Using well-established procedures, the subject smoked conventional filter cigarettes and the new KENT with the exclusive "Micronite" Filter.

For every other filter cigarette, the drop in temperature averaged over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

These findings confirm the results of other scientific measurements that show these facts: ordinary cotton, cellulose or crepe paper filters remove a small but ineffective amount of nicotine and tars; KENT's Micronite Filter *approaches 7 times the efficiency of other filters in the removal of nicotine and tars* and is virtually twice as effective as the next most efficient cigarette filter.

Thus KENT, with the first filter that really works, gives the one smoker out of every three who is susceptible to nicotine and tars the protection he needs . . . while offering the satisfaction he expects of fine tobacco.

For these reasons, smokers have made the new KENT the most popular new brand of cigarette to be introduced in the last 20 years.

If you have yet to try the new KENT, may we suggest you do so soon?

Takes out up to 7 times more nicotine and tars than other filter cigarettes

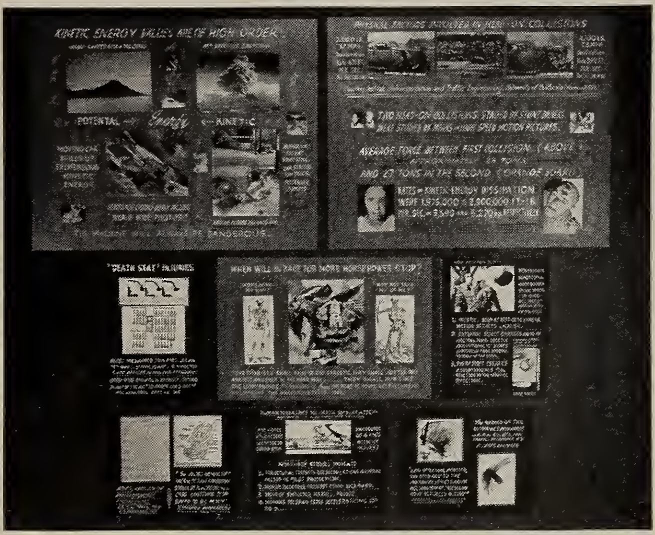
TWENTY
KENT
CIGARETTES
WITH THE MICRONITE FILTER
KENT

What Is Your Hobby, Doctor?

What Is Traffic Safety?

J. Kulowski, M.D., *St. Joseph*

Every doctor, I suppose, has some special medical interest. Mine used to be osteomyelitis. The advent of chemotherapy and antibiotics practically eliminated that disease from serious consideration. In the meantime, especially prior to the war (latest), I had been seeing more and more of the results of traffic accidents; most often in the hours when we have earned the right to a little sleep. Naturally, I developed a definite distaste for work which became more and more irksome and at the same time more and more valueless from the standpoint of prophylaxis and prevention. In other words, I realized more and more that traumatic events were more or less self inflicted; that they were the most disruptive elements for both doctor and hospital in regard to treatment; that they were the most likely threat from the standpoint of medico-legal action; that these people are in many instances the least appreciative of patients; and that for some unexplained reasons, we all tended to coddle these victims and make martyrs of them in the bargain. These are the selfish reasons for medical devotion to the elimination of these deterrents toward a fuller attention to medical and surgical problems which confront us daily and in which the human faults have little or no part.



A portion of the exhibit "What Is Traffic Safety?" exhibited at the St. Louis Clinical Meeting of the American Medical Association in December 1953. This panel emphasizes some of the physical factors involved in traffic accidents.

What are the unselfish reasons for our efforts to eliminate traffic accidents as well as all other types of accidental injury and death? The growing accidental incidence is a real challenge to medical groups; since accidental deaths are the leading cause of death in this country from the standpoint of working years lost (a factor which seems to be losing importance with our ever shrinking work day). The solution of this health problem needs the thinking and knowledge of all interested segments of our society; of which medicine looms ever larger as the problem increases. Here is an obligation which ought to lead us to a new era of Medicine: Social Medicine vs. Socialized Medicine. The public has taken for granted our participation in preventive public health in other fields. It cannot help but appreciate a resurgence of this spirit in the field of injury and death by violence.

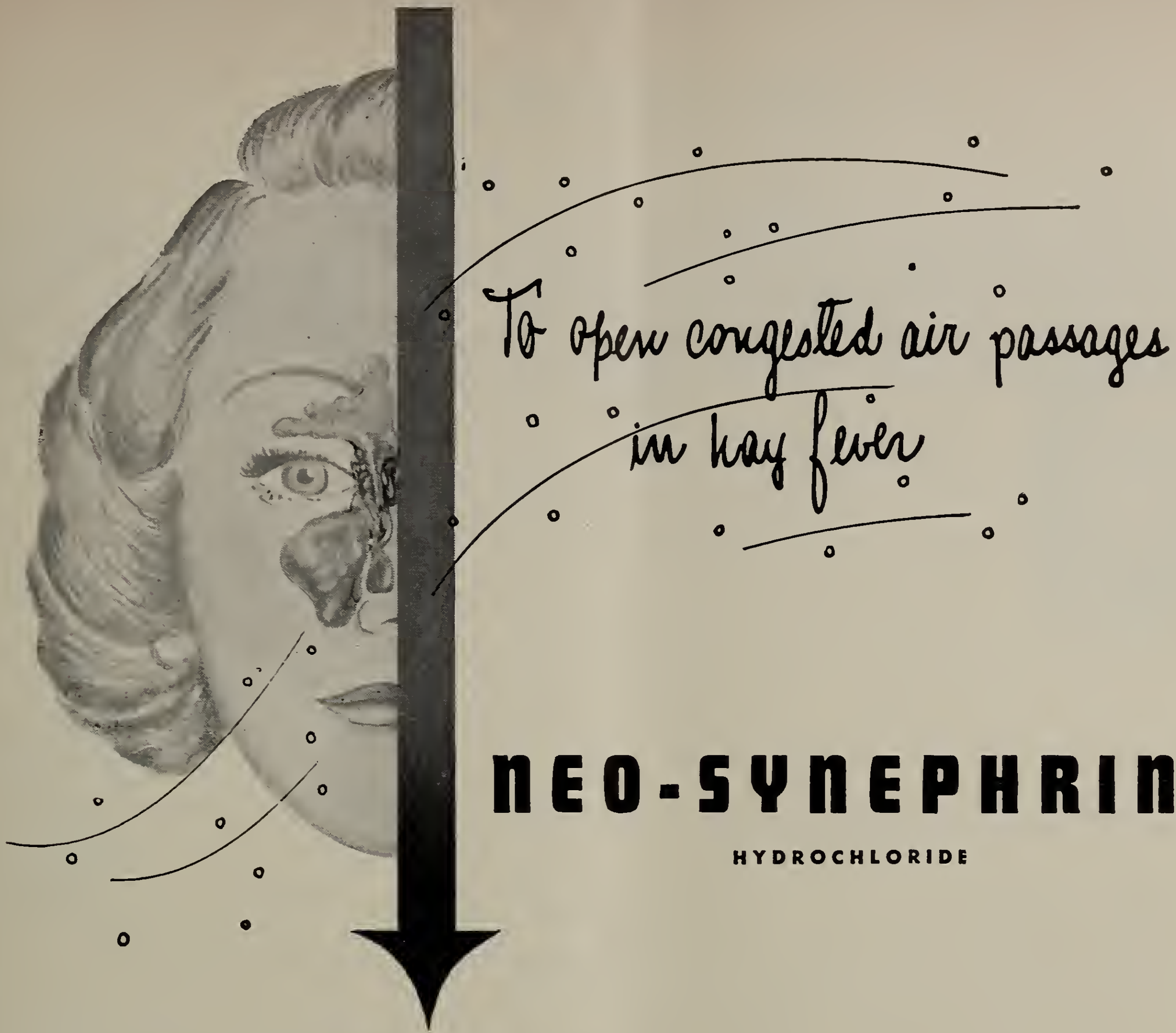
About five years ago I began to photograph the more spectacular traffic victims as they were brought into the hospital for treatment. At the same time I had already begun to lecture to lay groups on the theme, "The Human Ingredients of Traffic Accidents." Since I did not yet have adequate material of my own, I had to get it from the literature. I was then amazed at the meagerness of actual medical participation in this program. Actually, my first talk was before the Buchanan County Medical Society. Subsequently, I must have given fifty or seventy-five lectures before various lay groups.

My activities came to the attention of Walter Ladd, local head of the St. Joseph Safety Council, who publicized it and encouraged my efforts in many ways. Also he placed me on the board of governors of the St. Joseph Safety Council. Mr. Ladd is an active and sincere and intelligent safety professional who has won national recognition for his community efforts and accomplishments along these lines. Largely through him I gave (and still do) various talks usually illustrated from my growing material. I gave some talks in surrounding territory, even in Kansas City before a safety engineer's group. These seemed to be well received and my interest remained alive.

Thus it went for several years. I gradually came to the conclusion that something was missing in safety work; perhaps more precise medical and engineering criticism, although these thoughts were not quite crystallized at that time. Be that as it may, a certain satisfaction which I formerly got from these efforts was fading. I did not like the idea because I realized that the importance of the work demanded a continued interest in it.

About a year ago I decided to help enlist more medical participation in traffic safety work; feeling ever more definitively that such participation would do much to alleviate the appalling increase in traffic accident fatalities and injuries which was

(Continued on page 698)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A few drops of Neo-Synephrine 0.25% in each nostril will promptly check mucosal engorgement and hypersecretion, promoting greater breathing comfort over a period of several hours.

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Neo-Synephrine does not lose its effectiveness on repeated application and may, therefore, be relied upon to give relief throughout the hay fever season.

Neo-Synephrine is practically free from sting and compensatory congestion; does not appreciably inhibit ciliary activity. Neo-Synephrine has been found relatively free from systemic side effects such as nervous excitation, cardiac reaction or insomnia even when tested on hypertensive, cardiac and hyperthyroid patients.[1]

0.25% Solution (plain and aromatic)

0.5% Solution; 0.25% Spray (unbreakable plastic squeeze bottle)

1% Solution

0.5% water soluble Jelly

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[1] Van Alyea, O. E., and Donnelly, Allen: Arch. Otolaryng., 49:234, Feb., 1949.

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Neo-Synephrine, trademark reg. U.S. Pat. Off., brand of phenylephrine.

With Our Auxiliary

Mrs. W. E. Martin, *President*

The usefulness of our Directors is being realized to stress friendliness and education of ourselves and the public. We have 10 Directors—one from each Councilor District of the state, 5 elected each year for a 2-year term. They are the link between county and the state organization—keeping in close contact with each organized Auxiliary and seeking members-at-large or possible organizations in new locations through personal contacts. Perhaps their most important function is to help inform our members on important state and national aims and legislation; and, secondly, to stimulate the spirit of cooperation and fellowship through the common bond of friendship.

To accomplish these things the State Medical Councilors may help by consulting our Directors in their district and letting the wives come along to your District meetings. If they have a dinner together and a friendly time, then each group should have an informative meeting.

This year in Missouri we as Auxiliary members should know more about the Uniform Medical Practice Act—and the Medical Examiner's Law (to replace the Coroner's system)—so that we may intelligently answer any inquiries and suggest informed speakers for lay groups—and thus inform the public on this legislation.

Our Directors and the organized Auxiliaries in their territory are:

First, Mrs. A. S. Bristow, Princeton: Buchanan, Clay, Grand River (8 Counties), Nodaway-Atchinson-Gentry-Worth.

Second, Mrs. W. F. Francka, Hannibal: No organizations.

Third, Mrs. Theodore Griener, St. Louis: St. Louis City Auxiliary.

Fourth, Mrs. E. J. Helbing, St. Louis County: Franklin-Warren-Gasconade, St. Louis County, Jefferson.

Fifth, Mrs. E. A. Kibbe, California: Audrain, Boone, Cole, Cooper, Miller-Morgan-Moniteau.

Sixth, Mrs. S. P. Simmons, Marshall: West Central (5 Counties), Lafayette-Ray, Johnson, Pettis, Saline.

Seventh, Mrs. Wm. B. Allen, Kansas City: Jackson County Auxiliary.

Eighth, Mrs. R. C. Conrad, Springfield: Greene, Ozark (5 Counties), Jasper.

Ninth, Mrs. Claude W. Cooper, Thayer: 26th District with 5 Counties, South Central with 5 Counties.

Tenth, Mrs. Paul Wolff, Cape Girardeau: Cape Girardeau, Dunklin, Mineral Area (5 Counties), Perry.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

I had given a new mother with vaginitis a prescription for a douche. Two weeks later she called to report that every thing was alright. In that case I said she could stop the douches.

"Thank you, doctor," she said, "Between douches, dishes and diapers, I've had my hands in water all the time."

A little boy patient of mine had been to Sunday School for the first time. I asked him what they did. "Everybody sang," he said. "What did they sing?," I asked. "I don't know what the rest of them sang," he informed me, "but I sang Casey Jones."

An old man walking down the street saw a small boy sitting on the curb crying. He stopped and asked, "Little boy, what are you crying about?" The little boy said, "I'm crying because I can't do what the big boys do." So, the old man sat down alongside and cried too.

Old Doc McNeil was a confirmed "fox hunter" and always took a hound dog in payment for his colored confinement cases. One hound that he accepted as payment disappeared in about one month, and nine months later, after ushering another pickaninny into the world, he received the same hound as remuneration. It is rumored that this dog balanced the books for six confinements.

I had just examined a farmer's wife when her husband came to the office to get her.

"I have good news for you, Jim," I said, "Your wife is going to have a baby."

"Hain't surprised, Doc," replied Jim. "She's had plenty of opportunity."

My 6 year old likes to answer the telephone. The other evening the party on the line wanted to know my whereabouts and she replied, "Daddy's on a B.O. case."

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NEW filmtab* ...for faster drug absorption

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President's Comments

More than 43,000 persons, consisting of doctors, wives, exhibitors and guests registered at the recent San Francisco A.M.A. meeting. This was reported to be the biggest total registration in the history of the Association, though not the largest number of doctors registered.

Dr. Elmer Hess, Erie, Pa., past president of the American Urological Association, was unanimously chosen as President-elect. Dr. Hess is well known to Missourians and had previously accepted an invitation to give a scientific talk at the 1955 M.S.M.A. Annual Session.

Dr. Clark Bailey, Harlan, Ky., was elected Vice President. Drs. David B. Allman, Atlantic City, and F. J. L. Blasingame, Wharton, Texas, were reelected to the A.M.A. Board of Trustees.

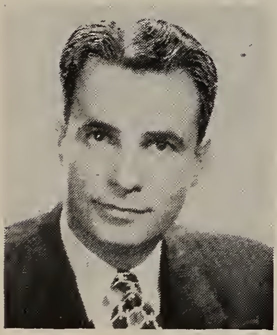
Atlantic City will be host for the 1955 meeting, Chicago in 1956, New York City in 1957. Clinical sessions will be held in Miami in November 1954, Boston in 1955 and Seattle in 1956.

H. E. Petersen, M.D., *President.*

Missouri Medicine in Review

Leo H. Pollock, M.D.

AUGUST 1914



The American Society for Control of Cancer held a public meeting in St. Louis. The principal speakers were Dr. William L. Rodman, Philadelphia, and Mr. Frederick L. Hoffmann, New York.

Dr. H. S. Crossen, St. Louis, presented "Treat- of Severe Prolapsus Uteri," before the Greene County Medical Society at Springfield.

The two year U. of Mo. School of Medicine remains in Class A plus by the American Association of Medical Colleges. Its work is accepted at full value in all medical schools.

George Homan, M.D., continues in the state journal his studies on Luke, the Galilean Prophet-The Greek Physician, "The derivation of the golden rule from Chinese sources and its adaptation by Luke to Western thought by the change to an affirmative form; the probable borrowing by him of the Oriental legend touching the virgin birth of a saviour (already a part of Buddhist faith) and, with his genius, clothing the idea in strikingly poetic and dramatic form; these two, together with the conception of the fatherhood of God and the consequent brotherhood of man, as foreshown from Hebrew sources and which probably dated back to an Egyptian origin, constituted the chief features of the new religion as declared by the Greek apostle in his gospel and the Acts."

AUGUST 1929

Dr. Kerwin W. Kinard, Kansas City, was elected president-elect of the American Association for the Study of Goiter.

Dr. Elbert J. Lee, Jr., superintendent, St. Louis City Hospital, succeeds Dr. Eugene A. Scharff, who resigned. Dr. Lee was superintendent of the St. Louis City Sanitarium for four years.

On May 16 Governor Caulfield announced appointments on the State Board of Health. Dr. James Stewart, Jefferson City, is reappointed a member and secretary of the Board. The other members are: Dr. H. L. Kerr, Crane, reappointed; Dr. H. W. Carle, St. Joseph; Dr. E. Sanborn Smith, Kirksville; Dr. Francis M. McCallum, Kansas City. Dr. W. A. Clark, Jefferson City, and Dr. H. S. Gove, Linn, are held over, due to unexpired terms.

AUGUST 1944

"Personal orchids of your reporter for this month to the Missouri State Medical Association and Dr. Carl F. Vohs for their courageous and farseeing stand on the problem of prepaid medical care. Some day Missouri will be proud to have been the vanguard of a movement to raise the standard of American life. We of medicine need to have no fear of Mr. Wagner and his colleagues if we provide something better."

A total of 15,374,698 persons or 11.6 per cent of the entire population received hospital care in 1943.

Dr. L. M. Garner, formerly health officer at Higginsville, is now director of child hygiene for the State Board of Health, Jefferson City.

There is no limit to the intricacies of the law. War Department Circular No. 205 defines the regulations about venereal disease and sets forth that venereal disease proved to be contracted from spouse is to be regarded as incurred in line of duty.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 August, 1954 Number 8

Psychogenic Symptoms: Differential Diagnosis

DON P. MORRIS, M.D., *Dallas, Texas*

This is an area of unique concern to the psychiatrist, who is a physician especially interested in the emotional and mental aspects of disease. In addition to his general medical training, he should have competency in the areas of individual psychology, sociology and social anthropology. The distinctive usefulness of the psychiatrist, in contrast to the paramedical professions, lies in the fact that his knowledge in these other fields is continuously patient centered and interrelated with general medicine.

It is increasingly clear that the causes of many common ailments are multiple rather than singular. The attempt to rule out organic causes alone is not enough for the good physician. It is rather his job to determine more clearly the interplay and interrelation between psychogenic and other factors in a given case. To assume the presence of psychogenic cause simply from the inability to find other etiologies is sloppy thinking. To assume the omnipresence or even the omnipotence of psychogenic causes from sheer enthusiasm or hopefulness is equally sloppy. Much of the psychiatrist's learning on this subject is from a series of errors in both directions—errors in which he has often participated. His contribution is then to identify, define positively, limit properly and test out the concept of psychogenesis. Thus can psychiatry move in the direction of a rational place in etiologic thinking, and a reasonable integration of psychotherapy in the total therapeutic armamentarium of the physician.

For our purposes psychogenesis is limited to those individual emotional and psychologic problems, those environmental stresses and cultural pressures which cause physiologic disturbance, disease and resultant symptomatology in the patient. We omit from consideration here the many important emotional and mental effects, secondary to other causes. Within the broad area of psychogenesis as defined, only the gross environmental disturbances, such as loss of property, war, death or disease of loved ones and the like, are readily understood. Cultural pressures are extremely subtle and are unobserved by most because we are too close to them and too closely identified with one cultural or subcultural group. The same consideration applies to inter-personal relationships. They are too close to us and a part of us. They are more often than not undramatic. They exert their effects in extremely small increments over long periods of years. Yet in the aggregate they are quantitatively more important in the production of symptoms than all the major disasters in the world.

The first step in determining psychogenic cause is the positive establishment of conflict and stress situations in the life history of the individual. This is best done simply as an extension of a good medical history. Information is obtained when the doctor instills confidence in the patient, when he is willing to listen to the spontaneous story of the patient, when he is flexible, nonjudgmental and accepting in his attitude. But this is not nearly enough. Since it is said so commonly "Everybody has troubles," what then are the special characteristics of the troubles that make them causative factors in the patient's symptomatology?

To be of etiologic significance any given stress factor must be subjectively and individually meaningful to the patient. The judgment of its so called objective significance is completely beside the point. A patient's continuing quarrel with his wife, for example, is important only as he interprets it. The size or validity of the quarrel as viewed from the doctor's point of view or from society's point of view is completely irrelevant, for the simple reason that it is neither the doctor nor society who is reacting to this particular environmental stimulus. It is rather this particular patient who is having the headache, for example, and who is reacting in the only way possible; namely, in terms of his own biases and his own conditioning from past experiences. The wife may

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Presented at the 96th Annual Session of the Missouri State Medical Association, April 4-7, 1954, St. Louis.

be an angel to other people, but her significance as an etiologic agent is determined solely by the effect she actually has on the patient, and has nothing whatsoever to do with the "rightness" or "wrongness" of her actions.

Secondly, a stress factor, however large it looms, cannot be an active etiologic agent when it is adequately compensated for. It will not produce symptoms under such circumstances. A common example of this is the man who compensates for marital conflict in a socially highly acceptable way; namely, in a complete and excessive absorption in his chosen occupation. When, and only when, this opportunity is no longer available does the conflict become an active agent in causing symptoms. Hence, any stress factor is inactivated when it is compensated for.

Thirdly, the problems of the individual will cause symptoms only if they have not been resolved by other circumstances. Emotional conflicts are frequently resolved in the normal course of events in a person's life by changes in the outward circumstances. The wife in the example given may find other outlets or occupation for herself and thus remove herself from the scene as a significant or continuing stimulus. Moreover, conflicts are resolved by self induced changes of attitude, sometimes by the acceptance of self, or by the realistic acceptance of others, or by the acceptance of the limitations of circumstances. When this has taken place, it is clear that the conflicts, however major they have been, are not now operative as etiologic factors. Thus stresses to be active factors must not only be uncompensated but also unresolved.

Fourthly, to be active in the production of symptoms, conflicts must in one way or another be active in the present tense. Emotional difficulties and traumata in the past are important in several respects. They are significant but not sole determinants of personality patterns which will react with more or less sensitivity to current conflicts. While apparently dormant or "forgotten" for long periods of time, they are quite readily reactivated by similar stimuli in the present, in which event they are not, strictly speaking, past conflicts. Often symptoms are produced with a combination of major current stresses, past reactivated stresses, and reaction to minor current stresses in terms of personality patterns made vulnerable through previous conditioning.

Symptoms are more likely to be psychogenic if there is some logical relationship between them and the conflict. Time relationships are interesting and suggestive though never conclusive. A patient to whom public speaking is important complained of weakness of his voice whenever he was under the stress of making a presentation. He had many known conflicts around this area, both past and present. Yet the fact was that this particular symptom was the onset of myasthenia gravis. If a given symptom occurs repeatedly in relation to certain events or certain people and, if one is certain that there are no other causes operating concurrently, then it is more likely that the symptom is psychogenic.

Logical relationships in location are suggestive. The relationship between masturbatory conflict and either paralysis or loss of sensation in the hand is at least reasonable and possible. Another patient with severe pain over the distribution of the lateral peroneal nerve proved to have not at all the expected disease of this particular nerve, but instead a series of conflicts as follows: This side of her leg had been injured twice in accidental falls at crucial times in her childhood. She had intense, life long conflict with her father who always whipped her on this leg. She had intense and disturbing dreams of sharp instruments in this side of her right leg. Her conflicts were all reactivated by current financial stresses and difficulties with her husband, to whom she had reacted in the light of her experiences with her father. The symptoms were permanently cured with simple, brief psychotherapy.

There are many other clues of clinical interest, but they are by no means sacred or diagnostic. When a patient is offered the possibility of a psychogenic explanation, if he reacts either strongly in favor of this or strongly against it, this is some evidence in favor of an emotional cause. When his reaction to such a trial balloon is neutral, it is more likely that some other cause is being overlooked. A patient's own theory is worth listening to; he will have to be encouraged to present it, but may have in his own observation important leads. When patients protest too much, in the discussion of fairly obvious factors in the life situation, insisting for example that "Everything in my marriage is all right," there is considerable likelihood that everything is not all right and that one has touched an important area. When in general discussion, or indirect discussion about other people, the patient asks many questions around one area, this is likely to be a point of great significance to him.

While multiple symptomatology is compatible with neurosis, it also occurs in metastatic carcinoma and a host of other conditions. Symptoms sharply circumscribed to one bodily area are more suggestive of an organic etiology. While such symptoms may occur in neurosis, they are more likely to be combined with some general tension, insomnia and loss of appetite, though special inquiry may have to be made for these more general complaints. Likewise while vagueness, ambiguity and lack of clarity in the description are compatible with psychogenic causes, and more often the case than not, they are not reliable signs. Patients with early multiple sclerosis or vitamin B deficiency, for example, may have similar vagueness in their stories. Not only the widespread nature of many diseases in the body, but the emotional state of the patient and his intellectual level all have a bearing on the description of symptoms. Matter of factness in the presentation, and ease of discussion in areas commonly emotionally charged are points against psychogenic causation.

The diagnosis of psychogenic etiology by exclusion alone is inexcusable. When there is a reasonable question that anxiety may be primary, the history should be expanded to include the points mentioned previously, and the search for other causes carries on simultaneously. Since observation for a number of organic conditions may take many months, it is best to carry on both types of inquiry concurrently, rather than to insist that one be finished before the other is started. When one definitive organic condition has been established, this should not be assumed to be the total picture. The good physician will make sure that he is meeting all the needs of his patient. A young female patient, who had mesenteric lymphadenitis, had numerous other symptoms not associated with or accounted for by this disease. She stated that she would have sought psychotherapy for a number of her difficulties whether she had any abdominal pain or not. When more than one condition is present, it is often wiser to give both psychotherapy and whatever medical treatment is indicated, and to simply bypass the academic question of the relative importance and exact distribution of the various factors contributing to the patient's discomfort.

It will be clear from the foregoing that even with careful study the best one can do often is to reach the conclusion that psychogenic causes are highly probable in a given situation. It may then be necessary to proceed on the basis of a highly probable theory—a step not unfamiliar to practitioners of medicine in other areas. By far the most conclusive evidence of psychogenicity is the removal of the symptoms by measures directed toward the relief of the underlying situation, either changes in the environment or changes in atitude on the part of the patient affected by psychotherapy. If one does a conscientious job of the complete history as presented, and follows through with exploratory psychotherapy just as he would with any other therapeutic trial, he will make no more mistakes than he will in many other areas of medical practice. The uneasiness and insecurity of many physicians in this area is simply due to lack of information. This basic information on human behavior should begin in premedical training, and should be emphasized in the elementary medical curriculum. What is now being offered mostly by psychiatrists should increasingly become part of the equipment of all physicians.

4708 St. John's Dr.

Goiter Problems

Three controversial approaches that pertain to the treatment of thyroid disease are the treatment of hyperthyroidism, the incidence and management of cancer in nodular goiter, and some technical phases of thyroid surgery. The merits of surgery of exophthalmic goiter versus radioactive iodine appear to be about comparable to each other. Radioactive iodine presents none of the potentials for tragedy that are occasionally encountered in surgery of the thyroid. Surgery, however, largely removes the potential of future cancer while radioactive iodine does not. To date, no cancer has developed because of use of this isotope. Radioactive iodine has not been effective in the treatment of cancer of the thyroid. The uptake of iodine is very poor, and it is chiefly confined to the uninvolved portion of the gland. It is more effective in metastatic cancer of the thyroid after total thyroidectomy, and its usefulness is further augmented if the isotope is preceded by administration of a thiouracil compound after total ablation of the primary lesion.

The incidence of nodular goiter and its relation to malignancy seem to vary geographically, but the incidence is so frequent that the surgical removal of all nodular thyroid masses is advised. Technical problems relative to the extent of surgery to be performed for cancer of the thyroid are likewise controversial. In general this cancer should be approached as cancer elsewhere, and the gland-bearing tissue should be removed. The prognosis often is favorable, especially if the lesion is of a low grade and no extension has occurred. Aberrant thyroid tissue may be of embryologic origin, but such cases are rare. I believe the malignancy usually is primary in the thyroid gland.—Claude J. Hunt, M.D., Kansas City, *J.A.M.A.*

"Just" a Vein Ligation

. . . after ligation and division of the common femoral vein, incapacitating sequelae appear in more than three-fourths of the persons operated upon . . . ligation and division of the superficial femoral vein are attended by the same sequelae, with a frequency of less than one in ten.

. . . Lumbar sympathectomy has no long-term curative influence on post-ligational ulceration, dermatitis, varicosities, or brawny edema.

. . . The etiologies of the postligational sequelae are unknown . . . apparently the site of ligation is the primary determinant. . .—John R. Robinson, M.D., and Carl A. Moyer, M.D., St. Louis, *Surgery.*

"Worth a Thousand Words"

. . . It would be most helpful to the physician desiring to be a leader in civil defense to attend one of the tests held at the Nevada Proving Ground or elsewhere. It may well be that not all who would like to attend such tests can do so; however, requests for attendance can be initiated through the local civil defense director. Having personally witnessed and taken an active part in one of these tests, the physician may rapidly become an "authority" in his local community.—Carroll P. Hungate, M.D., Kansas City, *J.A.M.A.*

Radioactive Iodine (I^{131})

In the Diagnosis of Thyrotoxicosis

F. T. H'DOUBLER, JR., M.D., *Springfield*

THROUGH THE YEARS, careful histories and physical examinations have been the most important and reliable methods for diagnosing thyrotoxicosis and, in the classical cases, they have sufficed. However, in the mild cases or in patients with other diseases resembling thyrotoxicosis, one is frequently confronted with many diagnostic problems. Probably the most common conditions incorrectly diagnosed and masquerading as thyrotoxicosis are anxiety tension states and menopausal cases. Therefore, one is always looking for laboratory tests which will aid in correctly diagnosing thyrotoxicosis in these questionable or borderline cases. In this paper, I wish to compare the data obtained from the diagnostic studies of eighty-eight patients considered to have possible thyrotoxicosis in an effort to determine the reliability of the various methods of diagnosis at present disposal.

All the patients suspected of having thyrotoxicosis, starting from the time when radioactive iodine uptake determinations were begun in this clinic, are included in this study. In all of these cases, careful histories and physical examinations, basal metabolism tests and radioactive iodine diagnostic studies were done. Some also had a therapeutic trial with Lugol's solution or tapazole. Most cases of hyperthyroidism, particularly Graves' disease, present obvious diagnoses but, in others, there is considerable question. In all cases stated to be thyrotoxicosis, the diagnosis was either proven by tissue diagnosis and clinical course postoperatively or by clinical improvement following radioactive iodine therapy. In all cases stated to be euthyroid, the diagnosis was made only after careful history and physical examination and, in the questionable cases, after a therapeutic trial with Lugol's solution, tapazole, phenobarbital or hormones. I realize that in some of the cases diagnosed as euthyroid, it is possible that thyrotoxicosis was present.

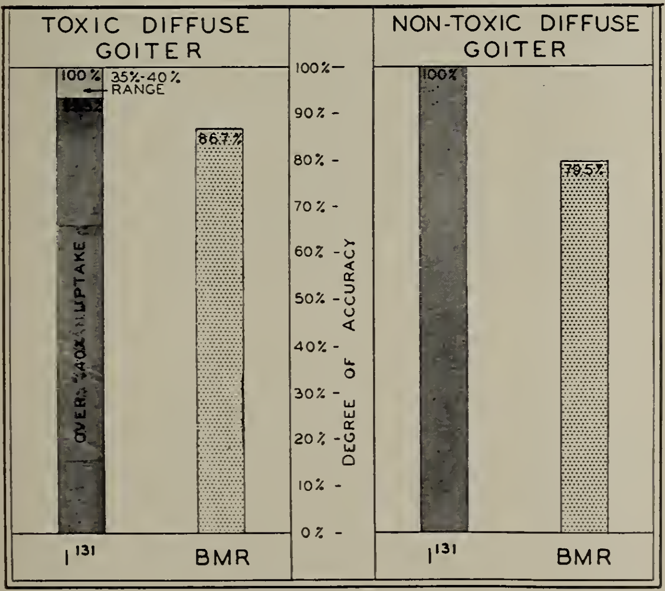
When a patient is first seen in the clinic, a complete history and physical examination are done. In addition to the questions of a routine history, the patient is questioned specifically regarding any recent ingestion of iodine, dessicated thyroid or antithyroid drugs. Any recent use of iodine might give a "false low" radioactive iodine uptake so one must be certain that patients receiving radioactive iodine have not ingested iodine and indeed not thyroid extract or antithyroid drugs within the past few weeks. Because iodine is contained in many vitamin preparations, cough medicines, vaginal suppositories, dyes used in x-ray, preparations used in dentistry, one must be careful to ascertain whether the patient is in an ideal condition to have diagnostic studies done with radioactive iodine. The use of iodized salt does not seem to appreciably affect the test. A history of any possible thyroiditis or congestive heart disease is likewise ruled out, as these conditions may also give "false low" readings. Recent use of cortisone might also inhibit radioactive iodine uptake because of its depressing action on pituitary function. No radioactive iodine is given to any patient in the second or third trimester of of pregnancy as the fetal thyroid might be affected by the radioactivity.

Having fulfilled these criteria, the patient is then given orally a small amount (5 microcuries) of radioactive iodine and instructed to collect all the urine excreted in the next twenty-four hour period. A basal metabolic rate is obtained the following morning. Twenty-four hours after giving the radioactive iodine, counts are taken over the patient's neck and the twenty-four hour urine specimen is "counted"; these counts are compared with standards which represent 100 per cent of the radioactivity. Therefore, it is simple to determine mathematically what per cent of the radioactive iodine is located in the thyroid gland and what per cent is excreted in the urine. The two counts should total about 90 to 95 per cent.

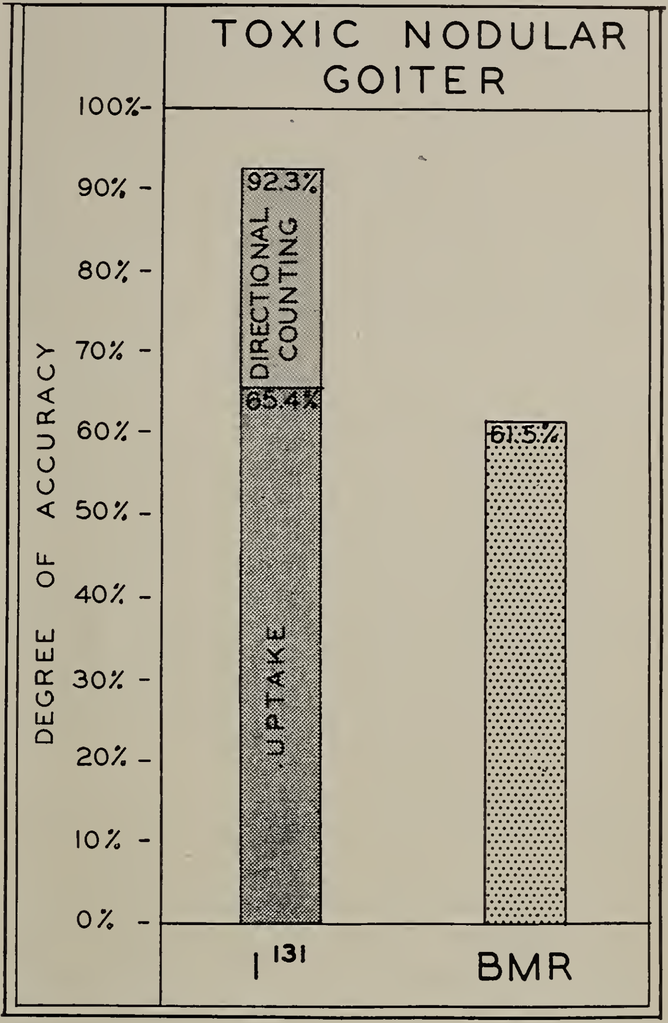
For all diagnostic studies, a scintillation counter with an Esterline-Angus recorder is used. The scintillation counter is preferred to a Geiger-Meuller counter as it is much more efficient for gamma ray detection and, therefore, much smaller quantities of radioactivity are sufficient to give statistically valid counts. These smaller quantities (tracer doses) decrease the amount of radiation exposure to the patient so that repeated studies can easily be tolerated. The total body radiation from the tracer dose is considerably less than that obtained from an x-ray examination of the gastrointestinal tract. It has been found that an uptake in the thyroid gland of 35 per cent or more is suggestive of thyrotoxicosis. An uptake of more than 40 per cent is pathognomonic of this condition. Diagnosis of thyrotoxicosis in the cases in the 35 to 40 per cent range is made only after further studies. This is called the "borderline" group. In many instances, additional information is gained by doing directional counting over specific parts of the thyroid gland even the entire body. In nodular goiters, it is particularly interesting whether the nodule collects more ("hot nodule") or less ("cold nodule") of the activated iodine than the surrounding tissue. Also, by directional counting, one can demonstrate displaced thyroid tissue or even metastasis, from a malignant thyroid, containing active thyroid tissue. On several occasions, small nodules would have been overlooked, deeply placed in the gland, had not the directional counting indicated "hot" areas.

Of the fifty-four cases suspected of having toxic diffuse goiters, fifteen were proven by the mentioned standards. In this group, the basal metabolic rate was 86.7 per cent accurate and the radioactive iodine uptake was 93.3 per cent accurate. The two cases, not diagnosed by the basal metabolic rate, were found to have normal basal metabolic rates. Normal basal ranges are from minus 11 per cent to plus 11 per cent. A third case had a radioactive iodine uptake of 38 per cent. Temporary therapeutic response to Lugol's solution and later permanent therapeutic response to radioactive iodine confirmed the suspected diagnosis of toxic diffuse goiter.

Of the thirty-nine patients suspected of having toxic diffuse goiters but subsequently proven to be euthyroid, the basal metabolic test was 79.5 per cent and the radioactive iodine uptake was 100 per cent accurate. The basal metabolic rate gave "false high" readings six times and gave "false low" readings two times. Repeated basal metabolic rates gave similar readings. In those with "false high" readings, the final diagnoses were as follows: two had neuroses, one had hypertension, one had bronchogenic carcinoma, one had mild cardiac decompensation and one had bronchial asthma. Of those with "false low" readings, one was menopausal and one was neurotic. In the uptake studies, there were no cases studied who fell in the "borderline" group. All of these patients had enlarged thyroid glands and symptoms of hyperthyroidism.



Of the thirty-three cases with nodular goiters, twenty-six were suspected of being toxic after history and physical examination. All were suspected of having a possibly malignant thyroid. The basal metabolic rate was accurate in sixteen cases (61.5 per cent) and the iodine uptake was accurate in seventeen cases (65.4 per cent). Further screening of the neck, in all but two of the other nine cases, showed there was a definite increase in the uptake of the nodule. This was interpreted as indicating hyperthyroidism. Pemberton's explanation that the rest of the thyroid gland "falls asleep" to compensate for an overactive nodule best explains why these, obviously toxic cases, have a normal over-all uptake of radioactive iodine. By using this directional counting, the percentage of accuracy is increased to 92.3 per cent. The two cases who had "cold" nodules had basal metabolic rates of plus 45 per cent and plus 55 per cent were clinically quite toxic and had large adenomatous goiters. In both of these cases the radioactive iodine uptake of the thyroid gland, much to our surprise, was less than 5 per cent on two occasions, the urine substantially accounting for the rest of the isotope.



There were eight cases in which the history and physical examination did not suggest hyperthyroidism but the nodule was thought to be a potential cancer. In all of these, the uptake and basal metabolic rate were normal or low. The most significant finding was that the nodules were "cold" nodules in all of these cases. The microscopic diagnoses on these were as follows: two were papillary adenocarcinomas, one was embryonal cell carcinoma, one was a lymphosarcoma (primary site unknown), one was a branchial cleft cyst adjacent to the thyroid gland and resembling a nodule and three were benign fetal adenomata without hyperplasia.

CONCLUSIONS

1. The radioactive iodine uptake study in humans is a safe and simple test for diagnosing hyperthyroidism and can be done as a routine office laboratory procedure.
2. This test is the most accurate laboratory test available, the over-all accuracy in our series of eighty-eight patients being 96.6 per cent when directional counting is employed and 97.7 per cent when the "borderline" case is also included. The basal metabolic rate had an over-all accuracy of 77.3 per cent in the same series of patients.
3. No "false high" radioactive iodine uptake readings were found in patients not proven to be thyrotoxic. Conversely, many other diseases may give "false high" basal metabolic rates.
4. Valuable information can be obtained in patients with nodular goiters by finding out whether the nodule is "hot" or "cold."

Professional Bldg.

They Still Get Infected . . .

. . . infection is especially likely to occur after insertion of a medullary nail . . . the patient should be watched carefully after the operation, and at the first signs of infection the wound should be inspected and, if necessary . . . opened widely, loose bone, but not the nail, removed, and vigorous treatment of the infection instituted. Such early treatment may abort or eradicate the infection before the bone is involved and permit the fracture to heal in the usual manner.

If the bone becomes infected, sequestra should be removed when discovered, but the nail should be left in place until union occurs . . . the treatment is similar to that now used in the treatment of chronic osteomyelitis. If the infection spreads up and down the track of the nail and this becomes loose and inefficient, it should be removed and the fracture treated as an infected compound fracture with or without union.—J. Albert Key, M.D., and Fred C. Reynolds, M.D., St. Louis, *Surgery.*

Colostomy Control

. . . The triad of colostomy care is made up of three requisites: (1) consistency of the fecal stream; (2) control of peristalsis; and (3) complete or adequate cleansing of the large bowel.

. . . The diet of the colostomy patient should consist of simple, bland foods which in themselves do not promote hyperperistalsis . . . as suggested by the Massachusetts General Hospital. . . .

. . . impressed by the fact that patients on reducing diets who were given dextroamphetamine sulfate . . . complained of constipation . . . to avoid the appetite suppressing effect of the drug . . . give it after meals, and thereby produce the constipating action. . . . A further desirable effect . . . was the sense of alertness and well-being. . . .

. . . If one is to accomplish complete cleaning of the bowel, it is necessary for this cleansing effect to reach back to and include the cecum . . . an impossibility unless a closed system is maintained while administering the enema.

. . . The patient inserts a No. 24 Foley catheter with a 30 cc bag through the colostomy stoma and then injects 30 cc of aid through the tube leading to the bag . . . the tube is clamped . . . slight backward pull is made on the Foley catheter which . . . brings the bag against the posterior part of the abdominal wall and the enema may be administered without . . . leakage. . . .

. . . most of my patients are able to cleanse the bowel in this manner once in forty-eight hours. . . .—Durand Benjamin, M.D., St. Louis, *The American Journal of Surgery.*

Of What Value Is Aortography?

. . . Aortography can be done with equipment readily available to all. . . . Where complete uteral block exists and intravenous pyelography fails to reveal any evidence of renal function, aortography is the only available means of determining pre-operatively whether or not the kidney is worth saving.

. . . Where the blood supply to a damaged kidney is adequate, every effort should be made to save the kidney except . . . in case of tumors or tuberculosis.

. . . Where the blood supply is inadequate, nephrectomy is usually indicated unless the opposite side is also involved in the ischemia.

. . . In lesions involving the arteries, aortography is the only method of identifying them accurately and locating the exact artery involved.—William F. Melick, M.D., St. Louis, *Southern Medical Journal.*

I'm a Fire Hazard?

. . . The importance of constructing garments from non-flammable materials during peace time would be inordinately enhanced during modern incendiary warfare, atomic and nonatomic. Three hundred thousand people were destroyed by fire storm in Dresden in one night and at least one-quarter of the casualties of the Nagasaki and Hiroshima explosions were of thermal origin. It is highly probable that many of those who died in Germany and Japan would not have done so had their clothing not caught fire.

. . . The most effective way of accomplishing a part of the ultimate medical aim concerning burns and scalds, the abolition of pain and death from thermal injury, is to effect changes in the ways of living. The unguarded, open flame should be abolished. Girl children should be dressed in pants rather than in skirts. The manufacture of garments from flammable fabrics should be prohibited.—Carl A. Moyer, M.D., St. Louis, *American Journal of Surgery.*

Chronic Duodenal Ileus

EMILIO M. CANLAS, M.D., *Poplar Bluff*

Duodenal ileus is characterized by intermittent delay in the passage of duodenal contents through the transverse duodenum (third portion), due to compression by the root of the superior mesentery artery, vein and nerve. It is found exclusively in patients of the habitus asthenicus with lordosis and a generalized visceroptosis.

Anatomically the transverse duodenum is the most fixed portion of the alimentary tract. It lies behind the peritoneum, in contact posteriorly with the aorta and the vertebra (usually third lumbar) and anteriorly with the root of the mesenteric vessel sheath. The superior mesenteric artery arises from the anterior part of the aorta at the level of the first lumbar vertebra. It passes downward and forward, anteriorly to the third portion of duodenum and descends between the layers of the mesentery to the right iliac fossa. In many postmortem specimens there is a groove visible on the anterior wall of the transverse duodenum, made by its contact with the superior mesenteric vessels. In asthenic subjects this depression is deeper and more prominent than in others. Because of its fixation, in some subjects the transverse duodenum cannot escape compression by the mesenteric vessels.

In four legged animals this pedicle of mesenteric vessels drops horizontally from the spine and therefore it has no tendency to interfere with the duodenum.

Etiology.—The most important causes are: (1) pressure by the superior mesenteric vessels, (2) congenital or acquired bands or adhesions, (3) anomaly of curvature or rotation of the duodenum by tumor or inflammatory scar tissue.

Predisposing causes are (1) a short mesentery which does not rest on the pelvis or against the anterior abdominal wall, (2) a relaxed redundant abdominal wall which affords no suport for the intestinal mesentery, (3) lordosis which undoubtedly diminishes the compartment occupied by the transverse duodenum, causing that structure to lie on a slightly convex surface which allows for increased mesenteric compression.

Symptoms.—Christopher, in comparing the major symptoms of patients with organic obstruction and those without real obstruction, found they are common to both conditions; in two particulars do they differ. In duodenal stasis due to real mechanical obstruction with gradual narrowing of the lumen, the vomiting is more constant without periods of well being. In duodenal stasis without demonstrable obstruction, the vomiting, pain or epigastric distress and other digestive disturbances come on in an attack associated with emotional disturbances or fatigue and followed by an interval of freedom from symptoms. In these cases it was noted that anxiety, asthenic and ptotic habitus are demonstrated in a far greater proportion.

Many observers like Willkie, Bokus, Friedenwald and Feldman have reported cases of peptic ulcer in association with mesenteric occlusion of the duodenum.

Diagnosis.—There are two conditions necessary to diagnosis of duodenal ileus from a radiologic viewpoint: (1) dilation of the duodenum, and (2) retention of barium beyond the normal time limit.

The cases presented here have the two necessary conditions. In addition, one has a peptic ulcer in association with duodenal compression by the mesentery. A review of the medical literature concerning this condition disclosed no mention of the plain film of the abdomen as another help in making the diagnosis.

REPORT OF CASES

Case 1. W. M. S. was admitted on June 30, 1952, with the chief complaints of upper abdominal pain and vomiting.

History of Present Illness.—Three days prior to the admission, the patient developed cramping pains in the abdomen followed by vomiting after the noon meal. The meal consisted of toasted bread and onions. In addition to the cramping pains, there was a burning sensation in the epigastrium. He had had stomach trouble since discharge from the service. There was never any blood in the vomitus and the patient could not tell whether or not there had been any bile. He had lost fifteen pounds in weight in the last three years.

Physical Examination.—The patient was an adult, white male, 42 years old, poorly nourished and acutely ill. He was slender in build, height 6 feet, 2 inches, weight 130 pounds, temperature 98.8 F., pulse 80, blood pressure 124/78. The abdomen was flat with muscle guarding over the entire abdomen; tenderness was complained of on palpation, being greater in the epigastric region. The abdominal veins were distended.

Laboratory Findings.—Urinalysis and hematology were normal, nonprotein nitrogen 41, serum chloride 575, serum amylase 115, serology negative.

On admission, an upright plain film of the abdomen showed a distended segment of small intestine with fluid level in the right upper quadrant. The remaining intestinal tract showed but little gas in the bowel lumen (see fig. 1).

Immediately after the x-ray was taken, suction was begun resulting in withdrawal of more than one liter of greenish material. There was never much distention of the abdomen.

The next day an upper gastrointestinal study was

From the Veterans Administration Hospital, Poplar Bluff, Missouri.

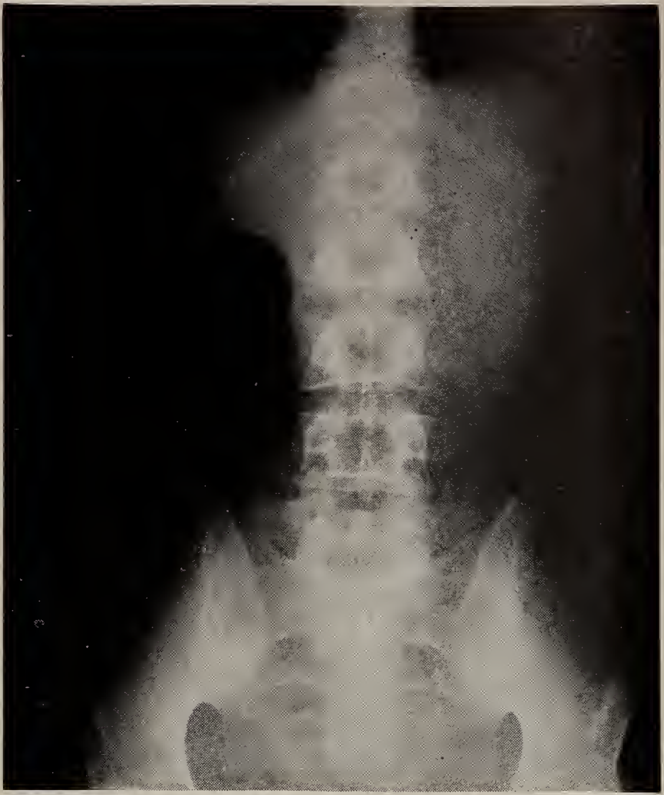


Fig. 1. Plain upright film of the abdomen showed a segment of small bowel dilated with gas and the remaining parts of the intestinal tract with little gas in the bowel lumen. Findings were compatible with diagnosis of partial mechanical obstruction.

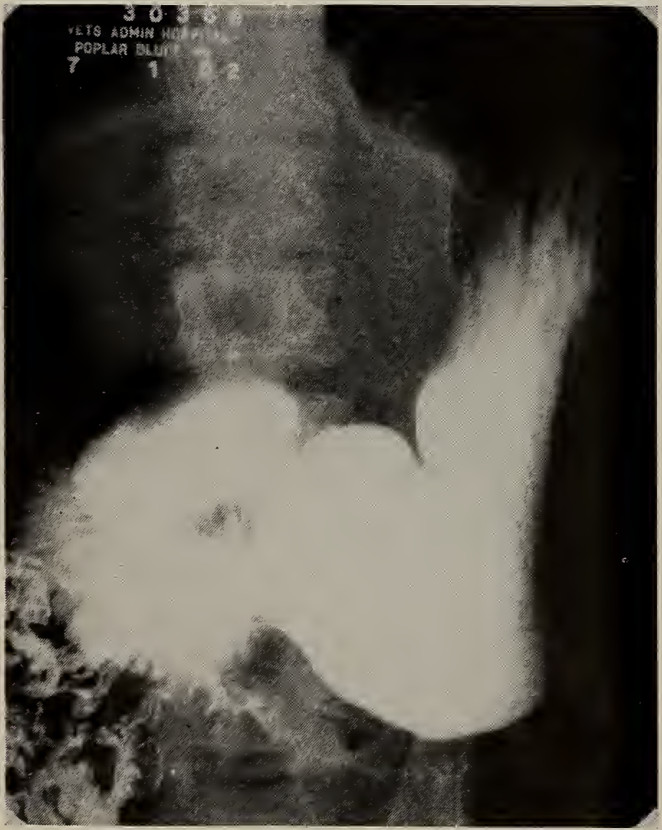


Fig. 2. Preoperative upper gastrointestinal study. Dilated first, second and proximal half of third portion of duodenum. Abrupt constriction at the mid part of third portion.

done and showed markedly dilated first, second and third portions of the duodenum. There was an abrupt constriction of the mid part of third portion of duodenum (see fig. 2). The two and five hour films showed barium residue in all parts of duodenum proximal to the middle part of the transverse duodenum (see fig. 3).

On July 2, 1952, the patient was subjected to exploratory laparotomy and duodenotomy. The ligament of Treitz was transected and that portion of the duodenum which lies posterior to the superior mesenteric vessels was completely mobilized and brought into view. It was at this point that the barium meal did not seem to pass beyond readily. The duodenum was opened longitudinally for inspection internally. No pathologic condition was found.

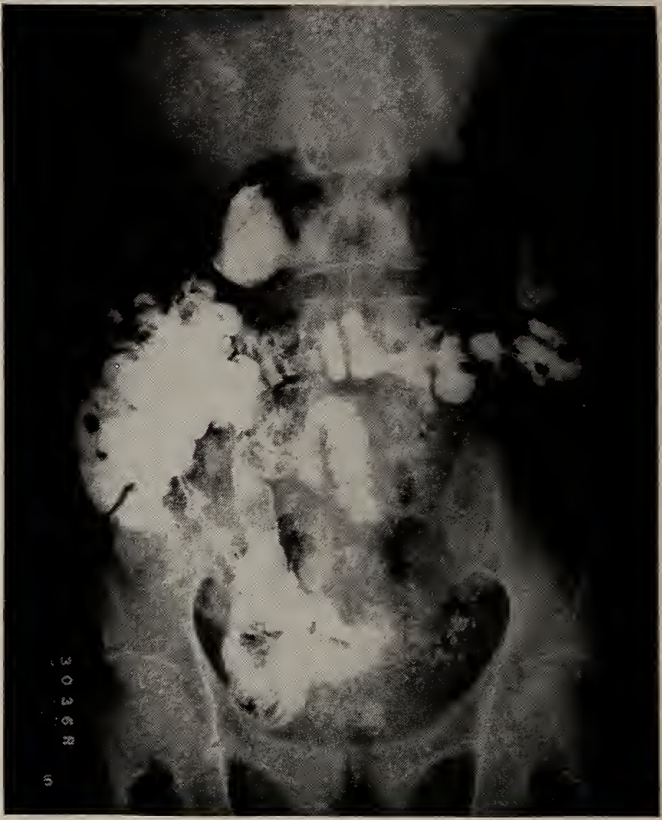


Fig. 3. Five hour film showed barium residue in the second portion and proximal half of third portion of the duodenum.

The lumen was quite adequate, being approximately 1¼ inches in diameter. The opening was closed transversely with two rows of dulox sutures. The remainder of the entire small and large bowel was explored. No pathologic condition was found.

The patient's postoperation course was uneventful and recovery was complete on the ninth day.

On July 14, 1952, postoperative upper gastrointestinal study was done and showed practically the same findings as seen before. All the three parts of duodenum were dilated with barium residue (see fig. 4).

After surgery, medical management was continued together with abdominal and postural exercises. Under this regime he has remained asymptomatic.

Case 2. H. B. M. was admitted April 17, 1952, with chief complaints of epigastric pain and vomiting.

History of Present Illness.—The patient had pain in the epigastrium four months prior to admission. The pain was relieved by food and alkalis. Vomiting had occurred on several occasions, but vomitus contained no blood or coffee ground material. There were no tarry stools. A weight loss of 25 pounds was described by the patient.

Physical Examination.—The patient was poorly nourished, slight of build, 55 years old, white male, chronically ill. Height was 6 feet, 6 inches, weight 105 pounds, temperature 97.4 F., pulse 80, blood pressure 100/70. The abdomen was scaphoid. The liver and spleen were not palpable. No masses were palpable. There was an area of tenderness above and to the right of the umbilicus on deep palpation.

Laboratory Findings.—Urinalysis normal, blood count normal, serum protein 7.2, albumin 3.4, globulin 3.8, alkaline phosphatase 2.30 units.

X-ray Findings.—A benign gastric ulcer 2 centimeters in diameter was shown on the lesser curvature of the pars media. There was dilation of first, second and third portions of the duodenum (see fig. 5). Fluoroscopy revealed a temporary obstruction at the mid part of the third portion of the duodenum with dilatation and reverse peristalsis proximal to the point of obstruction. There was no gastric barium residue at the end of four hours.

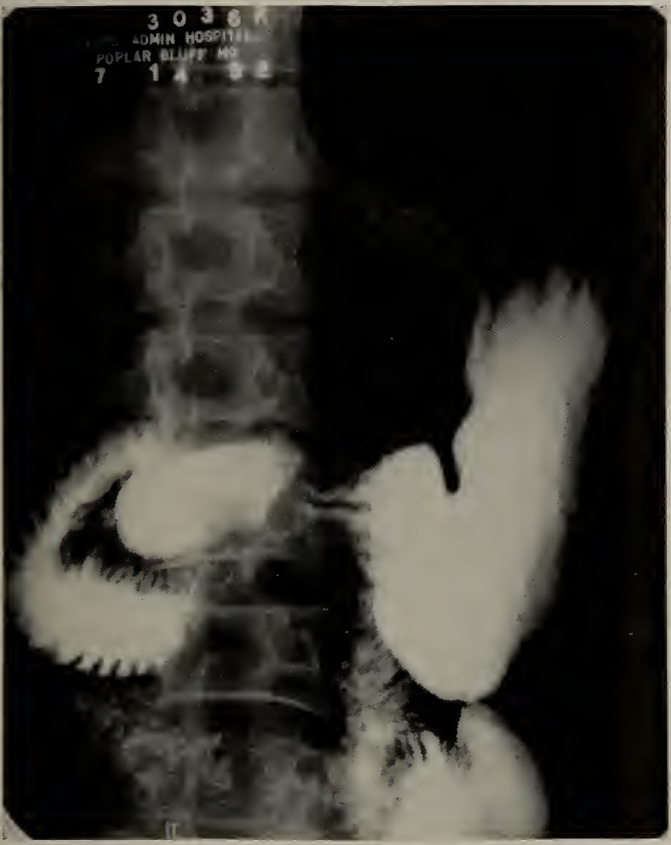


Fig. 4. Postoperative duodenotomy. Compare this film with figure 2, noting that there is similar dilation of the proximal parts of the duodenum.

Hospital Course.—The patient was placed on an ulcer regime with Banthine, resulting in relief of symptoms. Surgery was recommended because of the abnormal findings in the duodenum and gastric ulcer. On May 6, 1952, a subtotal gastric resection with posterior gastrojejunostomy was done. On May 27, 1952, postoperative upper gastrointestinal study was done and the findings of dilated duodenum was seen again similar to the preoperation finding (see fig. 6).

The patient was placed on medical management and positional exercises with great improvement. He remained asymptomatic and has gained weight since he was discharged from the hospital. He was discharged with final diagnosis: (1) peptic ulcer of stom-

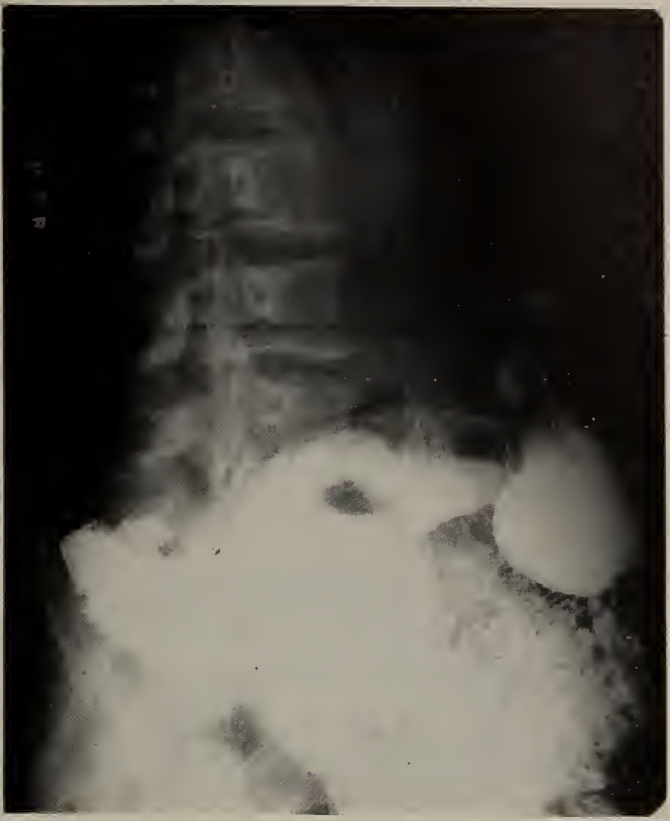


Fig. 5 Benign gastric ulcer of the lesser curvature of pars media and dilatation of the proximal parts of the duodenum. Note the conical shape of the mid part of the transverse duodenum.

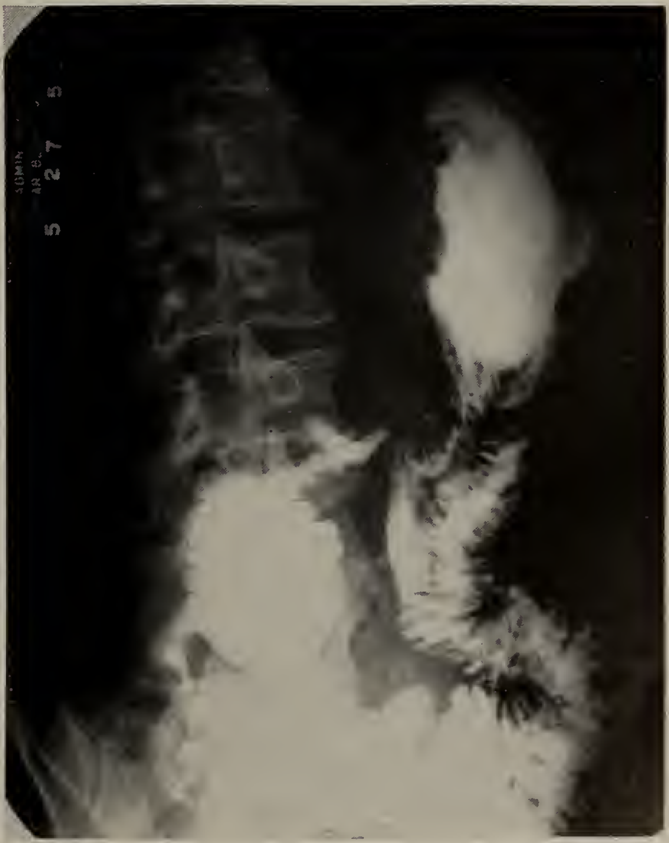


Fig. 6. Postoperative film. Compare with figure 5, noting similar dilatation of the proximal parts of the duodenum.

ach, operated, improved; (2) dilatation of first, second and third portions of the duodenum, unimproved.

SUMMARY

1. Two cases of duodenal ileus are presented for diagnostic and therapeutic management.

2. Medical management of duodenal ileus gives better results than the surgical procedures.

3. Plain film of abdomen and upper gastrointestinal study is the only means of making a diagnosis of duodenal ileus.

4. Upper gastrointestinal study is not contraindicated even if the patient has symptoms of intestinal obstruction like vomiting and abdominal pain.

5. Plain film of the abdomen is another aid in making the diagnosis of chronic duodenal ileus.

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Book Reviews

Peripheral Nerve Injuries, Principles of Diagnosis by Webb Haymaker, M.D., Chief, Neuropathology Section, Armed Forces Institute of Pathology, Washington, D. C.; and Barnes Woodhall, M.D., Professor of Neurosurgery, Duke University School of Medicine, Durham, North Carolina. Second Edition, 272 illustrations. W. B. Saunders Co., Philadelphia & London, 1953. Price $7.00.

The second edition of this worthy text on the diagnosis of peripheral nerve injuries has been increased by nearly one hundred pages, the bibliography has been greatly enlarged and many new photographs have been added.

Additional features include presentation of a modification of Sunderland's classification of nerve injuries, which should prove of value in prognosticating degree of recovery to be expected. Chapter six includes an excellent analysis of movements in terms of muscles which act as fixers and those which act as movers. Trick or substitute movements are also emphasized quite fully.

Detection of ulnar nerve injury by failure of adduction of the little finger is stressed in the 2nd edition, rather than abduction.

They incorrectly designate the foramen lacerum rather than the foramen jugulare as the point of emergence of the nerves involved in Vernet's syndrome.

This will continue to be a valuable reference for those encountering peripheral nerve injuries in both civilian and military practice. F. A. P.

Respiratory Diseases and Allergy (New Method of Approach) by Josef S. Smul, M.D., Author of Digestive Diseases and Food Allergy; Associate Gastro-Enterologist, Beth David Hospital; Clinical Assistant Physician, Beth Israel Hospital. Medical Library Company, New York, 1953. Price $2.75.

The first half of the book presents as the name of a disease, "respirallergy," classifies types of this disease and discards previously recognized terms.

In the matter of treatment, the author assumes that three substances, dust, ragweeds and catarrhal combined vaccine are universal desentitizers and may be used in any patient having respirallergy without any diagnostic tests. He outlines increasing dosage which would seem to be dangerously high by comparison with the relative safety in the low optimum dosage procedure of Hansel.

The second half of the book, devoted to "Infectious Diseases of the Respiratory System" and to "Neoplastic Diseases of the Respiratory System," presents nothing new. H. H. B.

An Atlas of Pelvic Operations by Langdon Parsons, M.D., Professor of Gynecology, Boston University School of Medicine; Chief, Department of Gynecology, Massachusetts Memorial Hospital; Gynecologist, Palmer Memorial Hospital; Gynecologist, Massachusetts Department of Public Health, Hospital for Cancer at Pondville, Massachusetts; and Howard Ulfelder, M.D., Assistant Clinical Professor of Gynecology, Harvard Medical School; Assistant Surgeon, Massachusetts General Hospital; Gynecologist, Massachusetts Department of Public Health, Hospital for Cancer at Pondville, Massachusetts. Illustrated by Mildred B. Codding, A.B., M.A., Surgical Artist, Department of Surgery, Harvard Medical School and Peter Bent Brigham Hospital, Boston, Massachusetts. W. B. Saunders Company, Philadelphia & London, 1953. Price $18.00.

This up-to-date atlas consists of pen drawings of what may be considered standard technics employed by the Meigs School at Harvard.

Preoperative and postoperative treatment is outlined and descriptive legends accompany each drawing of a step-by-step procedure. One may quickly refer to any subject by using a complete table of contents or the index.

Included are most of the usual gynecologic operations, repairs of the anterior abdominal wall, and a valuable section on bowel surgery. The last section contains descriptions of radical surgery for pelvic cancer.

Gynecologists will prefer certain of their own methods to those illustrated, but may also pick up valuable hints.

The atlas was never intended as a capsule to be taken in lieu of a residency in gynecology and should not be so used. It is highly recommended, however, for residency training and as a yard-stick against which gynecologists and general surgeons should compare their own technics. E. G. H.

Congestive Heart Failure

A Brief Resume of Fluid and Electrolyte Disturbances

ROBERT PAINE, M.D., *St. Louis*

THERE IS NEITHER time nor need for a comprehensive review of the phenomena of congestive heart failure. Rather, I will discuss the important and often unexplained electrolyte and fluid disturbances of cardiac decompensation.

NORMAL FLUID AND ELECTROLYTE BALANCE

Before considering fluid and electrolyte disorders, it would be well to discuss their roles in the normal subject. It is apparent that body fluids and electrolytes are delicately regulated by the balance between oral intake and renal excretion of these substances, and that losses from gastrointestinal tract, respiratory passages and cutaneous structures are disturbing rather than regulatory influences.

While fluid intake is governed by the sense of thirst, the control of this sense is essentially unknown. It can be simply demonstrated that thirst is not related only to dryness of the oral mucous membranes, for wetting of these surfaces fails to assuage the thirst of either the normal or the abnormal individual. On the other hand, thirst is possibly related to the volume of circulating blood. In conditions of acute deficiency of blood volume, the patient will insistently plead for water. Physicians who have cared for patients in shock will confirm this observation, and they will also recall the failure of sips of water or ice to give relief.

It has been noted likewise that thirst is sharply accentuated by a deficient flow of blood to the head. Subjects standing quietly begin to complain of thirst as blood is pooled in the lower extremities and as cerebral flow is curtailed.

Thirst is stimulated vigorously by hypertonicity of the body fluids, produced either by loss of water or by electrolyte ingestion or retention. It is pertinent to ask why the cardiac patient, swollen and ill with excessive body fluid, continues to desire liquids. I shall return to this point later in the discussion.

Similar questions may be raised regarding electrolyte intake. What determines or regulates one's salt ingestion is unknown. Why one individual prefers highly salted foods and another hardly seasons his meals is unexplained. Once ingested, however, salt in any amount is almost completely (95 per cent) absorbed by the normal digestive tract, for there are no known regulatory mechanisms controlling gastrointestinal absorption of salt.

Fluid and electrolyte excretion has been delineated more completely than have the factors governing their intake. While a liter or more of water and 20 or more milliequivalents of sodium and chloride are normally shed by the surface of the body and its respiratory membranes each day and another considerable quantity is discharged in the feces, the most significant route of excretion is the kidney, for the urinary tract is the only regulatory avenue of excretion of these substances.

Urinary salt excretion is affected strikingly by adrenal cortical hormones of the 11-desoxycorticosterone (DOCA) type. These hormones so affect renal tubular functions as to cause a marked resorption of salt, and with it an obligatory retention of water.

Renal water excretion is decreased sharply by the action of the posterior pituitary antidiuretic hormone upon the renal tubular cells. Absence of this hormone is followed by the remarkable polyuria of diabetes insipidus.

The suggestion has been made and debated vigorously that renal excretion is attuned in some way to the rate of renal blood flow. Some investigators have observed a prompt decrease in salt and water excretion when renal flow is curtailed; others have been unable to confirm these observations in man or in experimental animals. The height of the renal venous pressure likewise has been considered to affect urinary output—a venous hypertension being associated with antidiuresis. This evidence has also been conflicting.

The coordination of these influences upon renal function is undoubtedly complex. It has been suggested that they are synchronized by unidentified receptors in the head. Some receptors may be sensitive to the volume of blood in the head: when stimulated by a deficiency of blood these receptors may act through the pituitary-adrenal pathway so as to cause adrenal cortical liberation of hormones which effect renal salt retention. A second, and also nameless, intracranial receptor may be stimulated by the resultant blood hypertonicity to accelerate posterior pituitary hormone release and thereby cause renal retention of water. These successive processes in the presence of subnormal body fluids, indicated by decreased cranial blood volume, or flow, or by hypertonicity, may relieve the deficiencies of blood volume and correct deviations of concentration.

DISTURBANCES OF NORMAL BALANCE IN HEART FAILURE

When failure of the myocardium occurs, the normal processes are promptly affected. At the onset of myocardial insufficiency as the heart fails to empty itself with each contraction, the pressure of the blood in the failing chamber rises as blood continues to flow to it. This elevation of pressure is referred up the venous stream to the auricles, veins and, finally, the capillaries. In the presence of increased capillary hydrostatic pressure, fluid leaves the vessels in abnormal quantities, and the circulating blood volume is thereby diminished. Measurements of blood volume indicate that this situation does exist in some patients in congestive heart failure. They are edematous and deficient in blood volume due to the excessive transudation of fluid from the congested capillary bed. When this situation exists, the postulated cranial receptors may stimulate thirst and call into action the endocrine process outlined until blood volume is restored. That these events do take place in congestive heart failure is indicated by the discovery of increased salt retaining adrenal cortical hormones in the urine of such patients, and by the evidence of decreased sweat and salivary sodium concentration as well as blood eosinopenia. The demonstrable presence of antidiuretic substances in the urine is compatible with excessive post-pituitary activity. While the adrenal and pituitary glands may actually excrete more of their hormones in cardiac decompensation, failure of the congested liver to destroy these substances may potentiate their actions. Accumulation of salt retaining estrogenic hormones may result from hepatic congestion also.

In myocardial failure, the output of blood by the faltering ventricle may be diminished, and blood flow to the periphery may be curtailed as a result. Renal blood supply, perhaps more than any other, may be decreased, because a diminishing cardiac output incites active constriction of the post-glomerular arterioles. Glomerular filtration may occur at a normal rate or may be slowed. As has been indicated, the occurrence of salt and water retention under conditions of decreased renal blood flow has been vigorously debated. If salt and fluid retention does occur, it may be due to glomerulo-tubular imbalance, with decreased glomerular filtrate subjected to unaltered tubular resorption, so that a supernormal portion of glomerular filtrate may be resorbed. Once resorbed into the renal venous blood, this salt and water distends the vascular tree under pressure and dilutes other constituents of the blood, notably the plasma proteins. Elevation of hydrostatic pressure and reduction of protein osmotic pressure result and act together to augment the transudation of fluid from the capillary bed into the extravascular space. Decreased peripheral blood flow to the adrenal glands, to the pituitary and to the "nameless" cranial receptors may indirectly alter renal activity and result in retention. These possibilities remain unexplored. Furthermore, these chains of events may cause the accumulation of edema fluid in heart failure, and increase in capillary pressure is an immediate cause of transudation in either event. On the one hand, capillary congestion is a reflection of increased venous pressure and, on the other, it is the result of the swollen blood volume. Since, in all likelihood, both of these processes are going on simultaneously but at varying rates, edematous cardiac patients are found to differ in the level of venous pressure, volume of circulating blood, and cardiac output, renal blood flow, adrenal and post-pituitary hormone concentrations. In most instances the extracellular fluid volume is increased, blood volume is normal or increased and the concentrations of electrolytes are normal or slightly decreased.

EFFECTS OF THERAPY

The untreated cardiac patient usually presents himself to the physician with an enlarged extracellular space filled with normal or slightly hypotonic fluid. The symptoms are those of excessive extracellular fluid volume with no evidences of disordered electrolyte concentrations. When the physician brings his therapeutic armamentarium into action, the patient may have precipitated within himself a number of disorders of fluid and electrolyte balance which increase his discomfort and perplex his doctor.

Digitalis is the most innocuous of the therapeutic procedures in its fluid and salt effects. By increasing myocardial efficiency it tends to restore cardiac output and venous pressure toward normal and to reverse the processes which have led to salt and water retention. Digitalis may thus cause a beneficial shrinkage of extracellular fluid volume, accompanied by significant diuresis, without disturbance of electrolyte concentrations.

Since salt and water retention is fundamental to congestive heart failure, the therapist may be tempted to restrict water and salt intake. It has been demonstrated repeatedly, however, that water and chloride restriction are not beneficial to the patient. Indeed, administration of water or chloride, even in large quantities, results in no accumulation of edema in heart failure. If, however, sodium is given, in any form, a weight gain promptly ensues as extracellular fluid accumulates. Sodium, therefore, is the critical element in the water-salt retention of heart failure. The dietary restriction of soduim is of great benefit. The benign effect of chloride ion is often used to therapeutic advantage in the therapy of heart failure. If chloride is administered in the form of ammonium chloride, the ammonium ion is converted to urea. The kidney uses sodium for the excretion of chloride ion so that a sodium diuresis occurs, accompanied by an obligatory loss of water. After a day or two the kidney produces sufficient ammonium ion to "cover" the chloride excreted, and sodium diuresis ceases. It is for this reason that ammonium chloride is given for two to three day periods only. Prolonged use without interruption becomes ineffective as renal production of ammonium accelerates.

Thus far the physician is unlikely to alter fluid and electrolyte metabolism unfavorably by his treatment. If mercurial diuretics are administered, serious effects can appear. The primary action of mercurial drugs is upon the proximal or distal renal tubules to impede the resorption of sodium from the glomerular filtrate. These drugs allow sodium to pass through the nephrons, an obligatory volume of water escapes and water-salt diuresis results. This is a desirable result in most waterlogged cardiac patients. In a few individuals, especially those on extremely low salt diets, the lack of sodium is sufficient to produce a deficiency of sodium in extracellular fluids with a variety of clinical symptoms. Sodium deficiency is particularly likely to occur when the intake has been further curtailed by the use of resins. These agents have been widely used in industry to remove electrolytes from solutions, and the Navy has exploited the properties of resins to de-salt sea water. Clinical use of these giant chain polymers depends upon their release of loosely bound cations in the acid medium of the stomach and the reabsorption of cations in the basic milieu of the intestines. The combined use of a low salt diet and resins limits sodium intake to less than 0.5 grams a day in most instances. Mercurial sodium diuresis in the presence of such intake may readily deplete the body of this element. Since most cardiac patients have been treated with this regimen without sodium exhaustion, it may be that unfaithful adherence to a low salt diet protects them against sodium deficiency, or that sodium diuresis has been less massive. It is also possible that their fluid intake during the period of diuresis was sufficiently curtailed to prevent dilution of body electrolytes. To my knowledge, no study has been recorded of the possible protective effects of low fluid intake during mercurial administration. Perhaps low-water, as well as low-salt, intake during a period of salt-water diuresis would prevent disturbances of electrolyte concentrations in body fluids.

Once sodium deficiency has been induced in an effort to rid the patient of congestion and edema, a number of gastrointestinal, neuromuscular, renal or cardiovascular symptoms may appear and may seriously confuse and complicate the picture of congestive heart failure. Nausea and vomiting may be prominent and may mistakenly suggest digitalis intoxication. Drowsiness, apathy and finally coma may suggest a number of disturbing diagnoses. Muscular cramps similar to "heat cramps" may be severe. Oliguria, with rising nonprotein nitrogen, and failure of mercurials to provoke diuresis may suggest terminal renal failure. The associated fluid retention with increasing evidence of congestion in a drowsy, oliguric cardiac patient who no longer responds to diuretics may well suggest a terminal, irrevocable state of cardiovascular-renal collapse.

The association of sodium deficiency with this galaxy of symptoms and signs is only partly understood. Since the sodium ion is vital to neuronal stimulation and conduction, disturbances in these functions may precipitate drowsiness and coma in some patients. The hypotonic state of extracellular fluid may allow transfer of water into the cells with disturbances of intracellular physiology in the brain (headache, drowsiness, coma?), in the muscles (cramps), and perhaps in other organs. Renal failure in the presence of hyponatremia is poorly understood. Perhaps a sodium deficit stimulates maximal renal sodium retention, with resultant water and undesirable nitrogenous retention.

It is worth noting again that sodium diuresis following mercurial injection may produce a low sodium state with nausea and vomiting suggestive of excessive digitalis. Perhaps the classic excessive digitalis effect after diuresis is in reality due to low sodium concentration rather than to the release of digitalis from an ill defined depot by the diuretic.

It is quite apparent that the diagnosis of sodium deficiency should be suggested in a great number of situations that befall the cardiac patient, but confirmation of the diagnosis depends upon the laboratory determination of sodium concentration in the blood plasma. Since roughly 20 per cent of the body weight is contained in extracellular fluid, and since sodium is almost entirely an extracellular ion, one can readily estimate the total sodium deficiency when the blood sodium concentration is known. Normal plasma contains from 140 to 145 milliequivalents of sodium per liter. Should the plasma sodium level be 120 milliequivalents, a deficiency of 20 milliequivalents exists in each liter of extracellular fluid. The number of liters of fluid involved is 20 per cent of the body weight in kilograms. Thus, in a 70 kilogram man, there are 14 liters of extracellular fluid. If each liter lacks 20 milliequivalents of sodium, the total sodium deficit is 280 milliequivalents. To replace this sodium, one would prefer to administer it in the smallest volume of fluid possible to avoid further dilution of the extracellular fluid. It has been found that 5 per cent and 3 per cent sodium choloride solutions are safe and effective agents with which to repair sodium deficits. Each cubic centimeter of a 5 per cent sodium chloride solution (Molar sodium chloride) contains 1 milliequivalent of sodium. The patient with a 280 milliequivalent deficit would therefore require 280 cc. of this solution to restore normal sodium concentration.

These fluids, with high salt content, must, of course, be administered with care to the patient in heart failure. It is often wise to insert a venous pressure manometer in the intravenous tubing so that an overload of the cardiovascular system will be immediately recognized. Generally the improvement of the cardiovascular system that results from the instillation of salt under these conditions is revealed by a decrease in venous pressure.

Repeated determinations of blood sodium concentration often reveal a failure of the calculated quantity of salt to remedy the disordered electrolyte pattern, and second or third doses of salt may be required. Perhaps the "undershooting" of sodium requirement occurs because extracellular fluid volume may be larger than 20 per cent of body weight, or because a significant amount of sodium enters the cells. Once the deficiency is relieved, the response of the patient whose symptoms and signs are due to hyponatremia may be most dramatic. Drowsiness, anorexia, vomiting, coma and renal failure may promptly subside and what appeared to be a relentless heart failure may be stayed in a surprising fashion.

Although disturbances in sodium metabolism are most frequently seen in heart failure, other ions may become significantly deranged. Potassium may be lost in vomitus, or may be absorbed by resins. The adrenal hyperactivity of heart failure may cause potassium diuresis. Potassium loss may be so accelerated by mercurial diuretics that symptoms of deficiency occur. Weakness to the point of paralysis is seldom seen as a result of hypo-potassemia in cardiac patients, but significant cardiac effects are sometimes noted. In the presence of low potassium concentration, the toxic effects of digitalis are potentiated as indicated by arrhythmias and forms of heart block. Actual myocardial weakness as a result of potassium deficiency has not been demonstrated clinically, but the more decompensated the heart, the more potassium deficient is the myocardium and the more sensitive to further potassium loss. Once again the classical observations of digitalis potentiation by mercurial diuretics may, in fact, be due to electrolyte disturbances produced by the diuretics. The administration of potassium may often relieve a troublesome arrhythmia in cardiac decompensation, especially if digitalis has been given. Potassium administration generally, however, does not relieve heart block, even when due to digitalis.

The electrocardiograph is unreliable as an indicator of potassium deficiency in this situation because so many other influences are at work on the T waves, S-T segments, Q-T and QRS intervals that interpretation of potassium effect is difficult.

In conclusion, a word should be said about calcium disorders in heart failure. Mercurial diuretics may cause a significant loss of this element with the occasional occurrence of tetany. The laboratory determination of blood concentration is required for diagnosis. The electrocardiograph is without value.

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Book Reviews

Surgery and the Endocrine System, by James D. Hardy, M.D., F.A.C.S., Assistant Professor of Surgery, University of Tennessee Medical College. Printed W. B. Saunders Company, Philadelphia & London, 1952.

This book is a reasonably short, concise and well annotated summary of body defense mechanisms in the surgical patient, followed by an outline of current trends in the surgical management of disorders of the endocrine glands. Because it is short, it enables the reader to gain an overall picture of current ideas about the way the endocrines affect the course of the surgical patient before, during and after operation.

The first chapter considers the alarm reaction in the surgical patient and the physiology and endocrinology of stress, with notes on the role of ACTH and the adrenal corticosteroids in the stress of surgery, factors that are currently receiving increasing attention in the management of surgical patients.

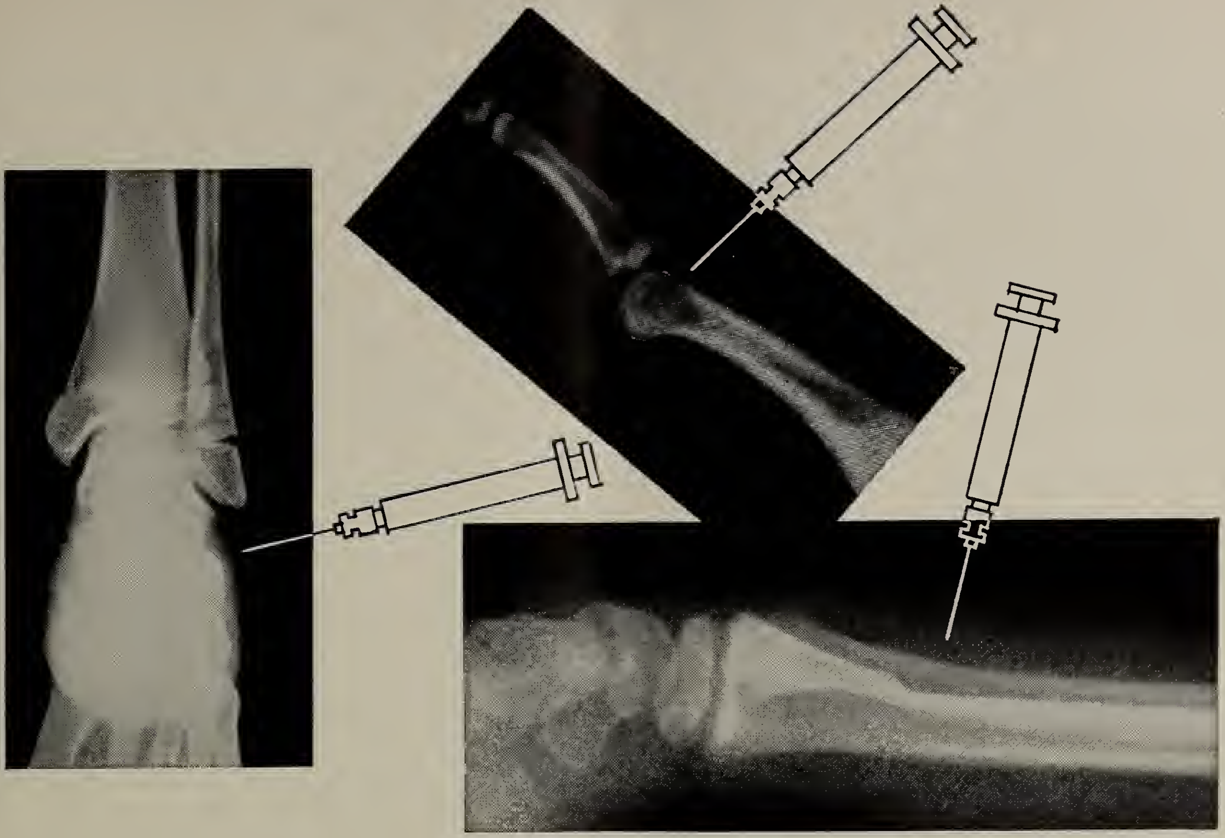
The book continues with other aspects of homeostasis, such as fluid balance, nutrition, early ambulation, tissue repair, burns, infection, and summarizes the role of the endocrines in these processes. There is an interesting short discussion on convalescence and the desire to get well.

The author then considers in separate chapters the surgical and endocrine aspects of disease of the thyroid, parathyroid, pancreas, adrenals, pituitary, thymus and gonads.

One of the main values of this book is the bringing together in concise summary new concepts from other fields so that the surgical patient is viewed from the changing perspective of modern endocrinological developments. It is thus quite helpful to the surgeon who must otherwise look through journals in many other fields in order to keep abreast of new developments in endocrinology and their increasing importance in the rational and safe management of the surgical patient. J. R. M.

Psychology and Psychotherapy of Otto Rank. An Historical and Comparative Introduction. By Fay B. Karpf, Ph.D. Author of American Social Psychology; Its Origins, Development, and European Background, etc. New York. Philosophical Library. 1953. Price $3.00.

This little monograph of 113 pages is devoted to some of the refinements of psychoanalysis. Presumably the work would be of interest to the non-orthodox among psychoanalysts. L. B. A.



Use of Alidase® in Closed Wounds: Contusions, Sprains, Dislocations, Simple Fractures

In traumatic surgery[1] where "definitive treatment . . . is often delayed while the surgeon waits for nature to dispose of hematoma and oedema" Alidase is an efficient means[1, 2] of accelerating dispersion of accumulated fluids.

Swenson[2] has described his highly successful results with Alidase in various types of closed wounds. He summarized them as follows:

To remove local fluid accumulations in contusions or bruises, "The usual dose, 500 viscosity units Alidase® mixed in a small amount of normal saline, is injected into the localized fluid. Mixing the hyaluronidase in 1 per cent procaine solution will also produce local vasodilatation, relief of local pain and more rapid absorption of the fluid mass. This method can also be applied to traumatized bursae or synovial spaces which do not respond to repeated aspirations."

The point of maximal pain is infiltrated with 10 cc. of a 1 per cent procaine solution to which 500 viscosity units of Alidase have been added. With this simple technic, a high percentage of successful results has been obtained.

Alidase may be used to advantage to produce more rapidly a short-acting, complete block anesthesia and to facilitate reduction in subluxation or complete dislocations of the interphalangeal joints. When anesthesia is required for fracture reduction, local block anesthesia can be simplified by adding Alidase to the anesthetic solution. Alidase also tends to decrease local edema and hematoma formation.

Fluids administered with Alidase are rapidly absorbed from subcutaneous tissue. The simplicity of hypodermoclysis avoids the cumbersome arm board, permits convenient administration with little or no pain or swelling, is vein-sparing and saves nursing time in such conditions as burns, postoperative states, toxemias and parenteral alimentation.

Alidase (brand of hyaluronidase) is supplied in serum-type ampuls of 500 viscosity units. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. G. D. Searle & Co., Research in the Service of Medicine.

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2. Swenson, S. A., Jr.: Minor Surgical Aspects of Closed Wounds, Am. J. Surg. *87*:384 (March) 1954.

Others Say

"Do It Yourself"

The responsibility of the cancer patient should begin at the community level and the study of the results will benefit both the physician and the patient. Because of the enormity of the cancer control problem, the Committee on Cancer Control of the American College of Surgeons as well as the Missouri State Health organizations and the American Cancer Society realize that improvement in detection, therapy and results must be brought to the community level and are therefore formulating plans by which more such local programs can be established. Even when the optimum number of clinics are organized the responsibility of detecting early cancer must still be borne by the family physician. As such it is accepted that the life of the cancer patient is in the hands of the first physicians that he consults which again brings the entire problem to the community level.—Milton Shoss, M.D., *Cape Girardeau County Journal.*

How Smug Can You Get?

Three general practitioners in the St. Louis area were approached recently by a member of the St. Louis Academy of General Practice and their membership solicited. Their varied response to the idea was as amazing as it was challenging. In every instance, however, there was the indication that the doctor did not feel any need for self improvement.

One stated that he was as busy as it was humanly possible to be and he didn't want any more patients. He felt that his present position was a result of individual effort entirely. He had never joined a local medical society. The A.M.A. had never done anything for him, so why should be join an organization which is only a constituent of the A.M.A. Membership in the American Academy would mean nothing more than annual medical dues and more meetings to attend. And after all, he attended Chamber of Commerce meetings and belonged to the Elks.

Another was even more soured and pessimistic and said he had watched our organization since its beginning seven or eight years ago, and figured he would join up when he had been convinced that it had teeth in it and that hospital privileges and medical privileges for the general practitioner had been improved. Well, in his particular area there had been no obvious changes and he figured we were just a bunch of drowning men grasping at straws.

A third resented most of all the educational requirements. He had gotten his degree cum laude and had been in active practice for twenty years. He didn't feel that it was necessary for him to go back to school in order to keep abreast of the advancement of medicine, and besides, he was already enjoying some privileges in one of the specialties in a small hospital and he felt that joining our organization would stamp him as a general practitioner and cramp his prestige on the hospital staff.

If these reactions are representative throughout the country, it is hardly understandable that the American Academy has made a phenomenal growth and is accomplishing its objectives today. It is significant of course that all these criticisms came from men who are not members of the Academy,—men who are not familiar with the purposes and ideals of the Academy. They represent the kibitzer who stands on the sidelines and criticizes those of us who are doing our best to play the game. While we are struggling to build higher standards of medical practice for the advancement of private and public health, and to better the relationship of the general practitioner, his profession, and his community,—these men are secure, self-satisfied and complacent. We repeat,—how smug can you get?—*News & Views, St. Louis Academy of General Practice.*

39 Winks Aren't Enough

"I want a plumber who will make night calls." That's an odd thing to be talking about in the medical journal. It's odd also because we never think about plumbers making night calls although I am sure they do. As long as plumbers have been in existence, however, people have not associated that noble art with the practice of making night calls. Not so, however, with the medical profession. The practice of making night calls and the practice of medicine have been partners down through the ages. Naturally, it has made an indelible impression upon the public so that we frequently hear the statement, "I want a doctor who will make night calls."

Night calls are the bane of the doctor's existence. It is not such a serious problem as it is a disconcerting one. My own experience indicates that 98 per cent of the night calls do not fall into the category of what could be considered serious emergencies. Most doctors can evaluate any ominous signs merely by carefully listening to the patient's story over the telephone. . . . The making of night calls disrupts the physician's sleep so that he is not at peak efficiency to carry on his duties of the next day.

This is a profession in which one cannot afford to make mistakes, and we have to give efficient services to most of our patients. In order that this be done, it is necessary that the patients make sacrifices in the direction of not demanding night calls.—S. W. Scorse, M.D., Joplin, *Tri-State Medical Bulletin.*

The Patient With Heart Disease

Recent Advances in Diagnostic Methods and Therapy

J. GERARD MUDD, M.D., *St. Louis*

ACCURATE DIAGNOSIS and management of patients with heart disease are no longer an ideal realized by the specialists in a few instances but is well within the grasp of every physician. The newer developments present a definite challenge to every physician who takes care of patients. He has a moral obligation to understand and recommend the correct treatment to the individual who has heart pathology. It was common, not long ago, for a physician to tell a mother, "your child has a heart lesion; she was born with this deformity and there is nothing we can do." Unfortunately, this attitude still persists in the minds of some physicians. Also, too common is the patient who in early life suffered an attack of rheumatic fever and has mitral stenosis but is not considered for operation on the stenotic valve. Surgery for mitral stenosis is, of course, one of the greatest ameliorative operations in adult heart disease developed in recent years and thousands of such operations have been done with great benefit to the patient.

New horizons are rapidly being approached and developments of paramount importance to cardiac surgery every year are being perfected and others, which were merely dim figments of one's imagination, are becoming reality. Improvements, new ideas, marvelous electronic and mechanical devices have pushed the time schedule far ahead of anyone's expectations.

This evolution has brought a myriad of new tests to the physician's aid and it is my purpose to comment upon a few of proper importance. Along with this advancement of technical knowledge, there has been a forward movement of less spectacular momentum in medical treatment and a few words will be mentioned in this direction.

ANGIOCARDIOGRAPHY

This is the visualization by roentgenograms of the heart and blood vessels accompanied by a venous cutdown, insertion of a large gauge needle and injection of an opaque dye. After the patient has been put on the x-ray table, in the proper position, the syringe containing from 40 to 50 cc. of contrast substance such as Urokon, is made ready and injected as rapidly as possible into the anticubital vein while a high speed multiexposure x-ray apparatus is initiated simultaneously. The reading of the films in sequence gives the course of the dye through the heart and blood vessels.

This method, which was first originated in the early nineteen thirties, began to mature in 1939 when Robb and Steinberg[1] described the first practical method for injecting an opaque dye into the venous system to visualize the heart and blood vessels. This method has become highly developed, utilizing high speed biplane roentgenography for multiple exposures (a unit designed for rapid casette changing and arranged in such a manner that with a double x-ray tube and film placement it is impossible to obtain posterior and all oblique view with only one injection of dye material). Dotter and Steinberg[2] have recently published a book on angiocardiography which well describes the technic and method of interpretation. Newer drugs causing less cardiac irritation and reduced sensitivity have materially aided in eliminating many of the hazards involved.

This diagnostic aid is used primarily in congenital heart disease for assistance in detecting abnormal shunts of blood through defects in the heart septae. By this method one can determine delayed circulation, abnormal flows from one side of the heart to the other and even abnormalities of valves in some cases. Aneurysms can be visualized and their location and size defined. Deferentiation between a pulmonary or mediastinal tumor and an aneurysm is possible. Arterio-venous fistulas, when visualized by dye injection, aid in localization for the surgeon.

BALLISTOCARDIOGRAPHY

Many different types of apparatus may be used but two simple models are available, one made by Sanborn and another designed by Dock. The Sanborn unit consists of a small recorder which when placed on the ankles of an individual in the supine position picks up movements and records them through a standard electrocardiography apparatus. A reproducible procession of waves is recorded, the major components of which have been designated by Starr as the H, I, J, K and L waves. Variations in the patterns seen determine the characteristics of the tracing.

Starr[3] first brought interest to bear upon this subject and, through the work of many others, it has become a highly developed means of determining movements imparted to the body by the force of the contracting heart and the acceleration and deceleration of ejected blood in the blood vessels. These forces are recorded as a wave pattern on paper and analysed in a fashion similar to an electrocardiogram.

Many different types of abnormalities can be

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seen but its diagnostic application is limited. A recent review by Gubner, Radstein and Ungerleider[4] sums up the matter with "it does not replace any existing procedures in the study of heart disease, but by providing information regarding the force of contraction and blood flow, it complements other procedures in examination of the heart. Its most useful sphere of application appears to be in providing a sensitive index of the force of the heart both in heart disease and in investigating the effects of pharmacologic agents on cardiac function." This research tool is being improved and many are attempting to develop methods whereby better quantitation of abnormalities can be made and thus make the instrument of value to the clinician. At the present time it is definitely not an office procedure.

SPATIAL VECTORCARDIOGRAPH

This subject[5] can be quickly dispensed with by saying that it is still in the developmental stage and at present has no clinical application in the general practice of medicine, but it has great potentialities and may replace the electrocardiogram as it is known today.

CARDIAC CATHERIZATION

This is a technic whereby a plastic catheter, (usually a French No. 7) is passed through a superficial median cubital vein and thence to the heart and the pulmonary artery. Here, and from all portions of the right heart, blood samples for oxygen saturation are obtained and pressure pulse curves are recorded. This procedure requires sterile technic and a team of at least three trained people to arrive at accurate data. The team usually consists of two physicians and a technician. The catheter is passed by direct visualization of the fluoroscope and the constant monitoring of a continuously recording electrocardiograph. Through careful team work and an awareness of the dangers inherent in the method, the mortality rate is approximately 0.1 per cent. This is offset, however, by the amount of information that can be obtained for both diagnostic and research use.

Ever since Cournand and Ranges[6] introduced the method into this country, there has been a great increase in the underlying knowledge of many heart lesions and blood vessel anomalies. This technic is also useful in studying the metabolism of the heart and the blood flow of other organs such as the liver and kidneys. The tests made by this method make the differentiation of most congenital heart lesions possible and enables the physician to determine whether or not the patient is suitable for operation.

By finding differences in blood saturation of the various chambers of the heart, abnormal shunting of blood can be detected and the diagnosis of a septal defect made. By knowing the differential pressures in the right side of the heart and the gradient across the valve area, stenotic valves are detected. This procedure is the best implement in the hands of the physician for diagnosing questionable congenital heart disease.

The cardio-pulmonary dynamics obtained in adults gives a differential diagnosis in such conditions as mitral stenosis, pericarditis and cor pulmonale. It is helpful in differentiating between mitral stenosis and insufficiency in doubtful cases. Venous catheterization is not always a routine procedure in preoperative mitral stenosis but adds greatly to ones knowledge of the physiologic changes imparted to the lungs and right heart by the stenotic mitral valve.

This method has proved successful enough to be established as a permanent division in most university hospitals. It is worthy of mention to repeat a statement made by the Committee on Cardiac Catheterization and Angiocardiography[7] viz. "these methods can serve physicians best as a supplement to, rather than a substitute for, clinical and radiographic examination."

RECENT TRENDS IN MEDICAL MANAGEMENT

Benefit[8] is obtained in some carefully selected cases of coronary insufficiency and myocardial failure or both through the judicious use of thiouracil (0.3 gm. to 0.6 gm. daily). This improvement cannot be expected for a month or more from initiation of treatment. Care must always be taken to avoid any toxic reaction from the drug and emphasis is laid upon the relative few that do benefit from this type of treatment.

Radioactive iodine (I^{131}) has been used more often recently and Blumgart[9] suggests that once hypothroidism has appeared, that thyroid medication be administered in sufficient dosage to maintain the metabolic rate at a level of –20 to –25 per cent. This usually requires 6 to 30 mg. per day. The same caution is advised with this treatment as with thiouracil, namely, careful selection and close observation.

The digitalis preparations of recent years have added greatly to the ease of treatment with patients who previously developed gastric irritation from the whole leaf. It has given the means for rapid digitalization and better control. Digitoxin is preferred by many as the drug of choice and the digitalizing dose of 1.2 mg. as suggested must be modified for each patient. Maintenance on 0.1 to 0.2 mg. is the usual case. In many situations Lantoside—C or Digoxin may be prefered. Gitaligan, another new cardiac glucoside of digitalis purpurea, sounds promising. Many other similar products are available with equally good results.

Diuretics as Mercuhydrin and Thiomerin can be greatly enhanced by the simultaneous use of ammonium chloride administered over a period of three to four days a week (3 to 4 gm. enteric coated per day). The patient will often develop a tolerance to the diurectic drug if given over a period of time and it may be wise to change from one to another for maximum effect. The oral preparations as Mercuhydrin with vitamin C and Neohydrin have helped a great deal in reducing the number of office visits for injections of a diuretic. Diomax, a new preparation, may be a highly improved form of oral treatment to promote diuresis. If sensitivity to the mercury diuretic develops, the antihistaminic drugs are at times effective in ameliorating the skin manifestations. In those who develop toxic manifestations the British anti-Lenisite (BAL) may be used.

Cation exchange resins are another form of attempting to reach the "dry state" in cardiac decompensation. Here one trys to bind and remove cations, especially the sodium ions from the gastrointestinal tract in order to encourage diuresis of the kidneys. This is a supplement to the other methods now in use but has not been too successful due largely to the patient resistance in most cases. It is difficult to consume this much bulk in a well state, let alone a cardiac patient who often has difficulty in maintaining a proper diet.

A recent improvement of an old method for treating cor pulmonale or, more properly speaking, emphysema in patients with cor pulmonale is the intermittent positive pressure aerosal inhalator. It is merely a machine which creates positive pressure breathing and an aerosal bronchial dilator incorporated. It provides better bronchial dilation purely by means of getting the drug deeper into the lungs (antibiotics may be added) and thereby possibly relieve the bronchial constriction somewhat better than by the usual methods.

Antifoaming agents used in pulmonary edema not controlled by the usual measures has been of some benefit in the hands of a few. Luisada[10] introduces ethyl alcohol into the oxygen line to reduce surface tension of frothy pulmonary transudate and with success in some cases.

Dicumoral, Tromexan, heparin and other anticoagulants[11] used in the therapy of myocardial infarction are still being debated pro and con; however, here again, the selection of the patient is of primary importance. The mild myocardial infarction patient with minimal symptoms of pain and no signs of shock probably does not need any anticoagulant, whereas the patient with persistent pain, preemptory signs of shock, temperature and other evidence of severe damage to the myocardium would require careful therapy. Of paramount importance is the availability of prothrombin time levels. Along with this is the cognizance on the part of the physician to the dangers that may occur and the immediate use of vitamin K and K_1, and transfusions if bleeding does result.

The use of pressor type drugs[12] such as Norepinephrine in the treatment of shock caused by myocardial infarction has been tried with favorable results in many cases; however, further clinical trial is necessary.

Quinidine and a more recent drug Pronestyl are used in cases of ventricular arrhythmia, and in some cases of auricular arrhythmia. Oral dosage for conversion of the arrhythmias is seldom accompanied by sensitivity reactions, but it is still the better part of valor to test dose the patient before quinidine is administered. Caution is advised with Pronestyl against blood pressure fall and especially is this true for both drugs when given intravenously. Extreme care and constant observation are necessary to detect toxicity. Electrocardiographic monitoring should be constantly available to follow the heart rhythm for signs of drug toxicity.

Mention should be made to emphasize the importance of antibiotic treatment in certain types of heart disease during dental extractions or other minor surgery. Those with valvular disease from rheumatic fever or deformities of congenital origin must be carefully advised of the danger of bacterial endocarditis. In addition, all patients having rheumatic heart lesions subject to frequent upper respiratory infections should receive prophylactic penicillin, especially during the winter season. This seems an important aspect in reducing the number of recrudesences of rheumatic fever.

These neoteric methods of diagnosis and treatment that have been mentioned have been demonstrated over the last few years to be reliable. It is important that each physician acquaint himself with the qualities of the test or medication, as the case may be, and determine its potentialities for his patient. Certainly many cases of medical advice as "nothing more can be done" are not justified today and especially is this true in the light of recent strides made in the surgical repair of valvular damage and congenital cardiac abnormalities. The knowledge and the technical know-how is preceeding at express speed and the physician in practice today must "climb aboard" in order to provide for his patients the best that medicine can provide.

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50 *and seven*

YEARS TREATING ALCOHOL AND DRUG ADDICTION

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Case Reports

Pulmonary Embolus

Fatal Pulmonary Embolus Originating in the Upper Extremity

L. RICHARD WEBB, JR., M.D., *Springfield, Mo.*

PULMONARY EMBOLI originating from thrombosis of veins of the upper extremity are generally considered a rare occurrence. Reimmann[1] states that from 70 to 80 per cent of pulmonary emboli have their origin in leg veins. Rubin[2] remarks on the infrequency with which thrombosis of the veins of the upper extremity lead to embolism.

Veal,[3] in 1943, pointed out that thrombosis of the axillary and subclavian veins was usually secondary to other diseases. In his series of forty-six cases, neoplasm involving the thorax was the most common cause, while heart failure was second as a precipitating factor. Pulmonary emboli did not occur in thrombosis following neoplasm in his experience, but were common when thrombosis occurred as a result of heart failure.

More recently Loring[4] has reviewed the literature collecting reports of eighty-three patients with thrombosis arising in the upper extremity as a complication of heart failure. To these he has added four more cases of his own. Pulmonary infarction occurred in thirty-six of these patients. Loring contrasts this with effort thrombosis of the upper extremity in which pulmonary embolism is much more rare.

C. E. Tomlin[5] has also currently emphasized the importance of thrombophlebitis in the veins of the upper extremity by presenting five cases with pulmonary embolism. Of these five, one died as a result of repeated emboli to the lungs.

The following case is presented as an additional instance of a fatal pulmonary embolus arising from venous thrombosis occurring in the veins of the upper extremity. In this patient the underlying cause was a pulmonary neoplasm.

REPORT OF CASE

Mr. S. M., a 46 year old dental technician, entered Burge Hospital in Springfield, Missouri, in December 1952, with a chief complaint of swelling of the right side of the neck of ten days duration. Except for increasing weakness and a cough of two months duration he had felt well. The cough had been nonproductive, rarely severe enough to keep him awake at night and only slightly more intense than the "morning cough" he had been subject to for "twenty years." There was no hemoptysis. The recent onset of swelling of the neck was described as a tender enlargement and thought by the patient to be due to enlarged glands. There was no previous history of serious illness.

Physical examination at the time of admission showed a pale, ill appearing male with an infrequent dry sounding cough. The significant findings were as follows: The right external jugular vein was thrombosed and palpable throughout its course in the neck. There was an edematous obliteration of the right supraclavicular fossa. Palpation in this area also revealed a large firm lymph node which was movable and nontender. No other lymph nodes were palpable. There was dullness at the right lung base posteriorly and at the right apex, with diminished breath sounds and fine dry rales over these areas. There was marked clubbing of the fingers. The blood pressure was 120/80 and there were no heart murmurs. Abdominal and rectal examinations showed no masses or other abnormalities.

Laboratory data on admission showed a red blood count of 4,450,000, a hemoglobin of 13.8 gms., and a white blood count of 11,400. Repeated sputum studies were negative for acid-fast bacilli, and the first and second strength tuberculin tests were negative. The urinalysis showed no abnormal findings. X-ray examination of the chest was reported as indicating an extensive infiltrative process involving the right lower lung field, and right apex with enlargement of the hilar structures bilaterally. These changes were thought to be due to a bronchiogenic carcinoma.

Shortly after admission the edema of the right supraclavicular fossa extended to involve the right arm and right anterior chest with obviously dilated superficial veins in these areas. A biopsy of the enlarged supraclavicular node was reported as showing replacement of normal lymphoid tissue by metastatic carcinoma. About two weeks after admission the patient developed a high spiking temperature, tachycardia and right sided pleuritic pain accompanied by increased cough. Seven days following this, while being taken in a wheel chair to the x-ray department, the patient suddenly became cyanotic, markedly dyspneic and, in a few minutes, expired.

An autopsy was performed by Dr. E. B. Hanan. This revealed a bronchiogenic adenocarcinoma primary in the right lung with wide spread perivascular metastasis. In addition to this the right innominate vein was found to be compressed by a mediastinal neoplastic mass growing into the base of the neck. The branches of the axillary vein and the axillary vein itself on the right were thrombosed. No other thrombosed veins were found. On opening the pulmonary arteries a large clot was found obstructing the main pulmonary trunk at the bifurcation. It was the opinion of the pathologist that death was due to pulmonary embolus deriving from the right axillary vein.

SUMMARY

This patient represents an instance of a large pulmonary embolism originating from thrombosis of the axillary vein. The thrombosis itself was due to partial obstruction to the flow of blood in the vein by spread of a bronchiogenic carcinoma. The patient's mounting fever, pleuritic pain and increasing pulse rate for several days before the massive embolism most surely were caused by showers of smaller emboli to the lungs.

It appears clear that venous thrombosis in the upper extremities needs to be treated with the same respect accorded that condition elsewhere. This report has been made to further emphasize the dangers inherent in the presence of this condition, regardless of the underlying cause.

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Not Important?

There comes a time to us all when nothing seems quite real—when one wonders if perhaps more than a little of the criticism levied against our profession isn't all too true—that perhaps we pay too much attention to cash values and too little to common courtesy.

One of our colleagues and the family of another has every reason to believe this. . . . When over half the members of the Medical Society—honorary Pallbearers—fail to attend a Colleague's funeral it is past time to pause and take stock. When only three members of the Medical Society took thirty minutes out of their office to attend a Colleague's Mother's funeral, then he has every reason to feel he has been let down.

. . . It is not at all out of order to suggest that we pay much more attention to the common courtesies in life which in the long run will pay heavily in cash values. Whether you believe it so or not matters little. To the people who were there, and most of them noticed, it matters greatly.—Pete V. Siegel, M.D., *Pettis County Medical Journal.*

Unusual Fracture

During Electroconvulsive Therapy

W. M. GANSLOSER, M.D. *St. Louis*

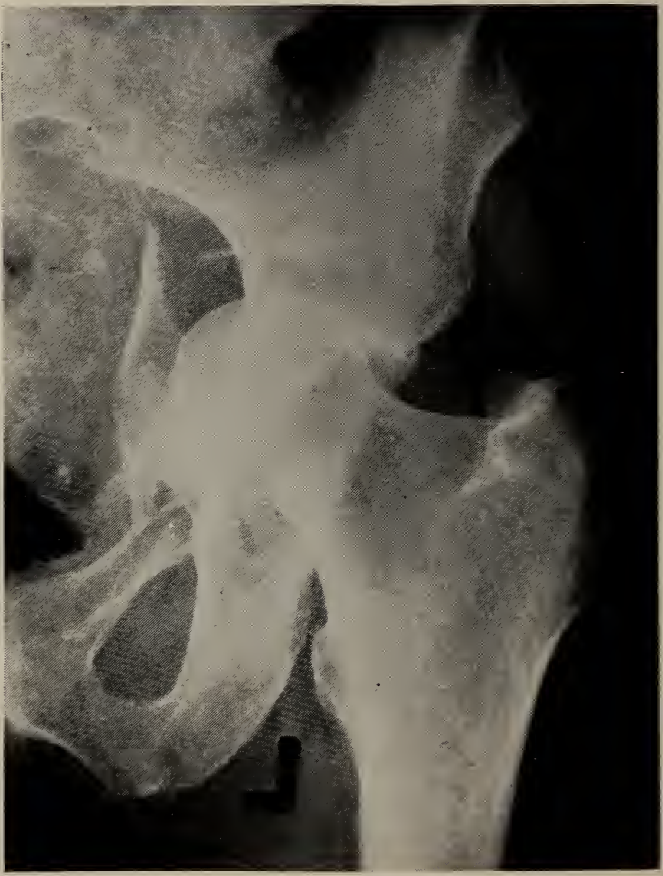
The patient, a 55 year old, white male, developed agitation and depression. He threatened suicide and to take his beloved wife with him. This, in turn, precipitated psychiatric consultation.

The patient was hospitalized and received the usual physical examination, chest x-ray and electrocardiogram. All findings were within normal limits.

He was started on electric treatments—a plateau wave machine, 200 milliamperes for one second. His response to the first treatment was not unusual. There were no physical complaints other than those that he had had previously with his depression.

Two days later a second treatment was given using the same dosage. At the end of the tonic phase there was a loud noise similar to that of a dry branch being broken. This was heard and felt by all members of the treatment team. Patient then went into the clonic phase of the treatment. Immediate examination showed a 2 inch shortening with helpless eversion of the left lower extremity. The patient was restless, moaning with pain. He was given ¼ grain of morphine and sent to the x-ray room which confirmed the findings.

His depression rapidly improved, but the orthopedic problem involved was both interesting and complex. Survey of the literature shows no similar injury under these conditions.



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Special Articles

The Administration's Health Program

PARKE M. BANTA, *Washington, D. C.*

General Counsel, Department of Health, Education, and Welfare

I AM GRATEFUL to you for inviting me to be here, in the Capital City of my own State, to participate in a program sponsored by the Missouri Health Council. Along with the letter of invitation, Mrs. McCabe sent a list of member organizations, and it is an imposing one. It must be gratifying to each of you that there exists such a fine spirit of cooperation, that you can all join together in this Annual Spring Conference to study a problem which is so important as "Health Protection for Rural Missouri." I understand that the purpose of this meeting is not only to discover the precise problem, but to find ways and means to contribute to its solution.

President Eisenhower, on Januray 18 of this year, in his health message to the Congress pointed out that the progress of our people toward better health has been rapid—that in 1904 the life span was 49 years; today it is 68 years. He praised the partnership and teamwork of private physicians and dentists and of those engaged in public health, with research scientists, sanitary engineers, the nursing profession and the many auxiliary professions represented here related to health protection and care in illness.

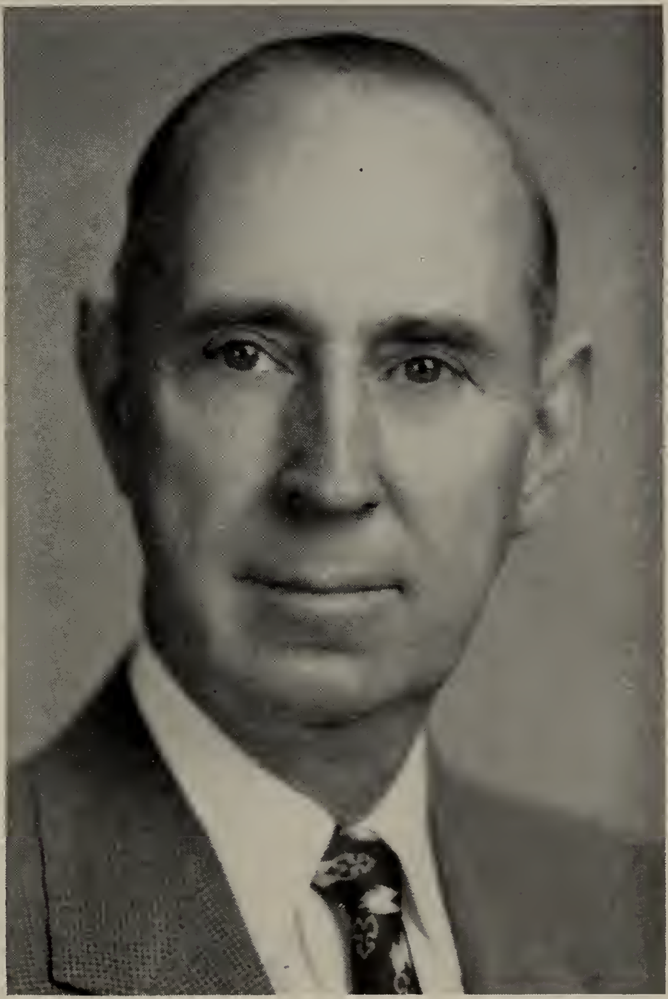
The good health of our citizens is basic to our national way of life. Our national defense depends on the vigor and physical condition of the country's youth; our industrial economy is sparked by the vitality of millions upon millions of men and women; our individual happiness rests on the day-to-day health of the family.

Great strides have already been taken toward better health and medical care through the efforts of the medical profession, private research organizations, the nation's universities, Government laboratories and services, organizations such as yours, and through the remarkable development of private, voluntary health insurance plans.

There is, however, no ceiling on health improvement. Past achievements must not lead to complacency regarding measures for better health protection. For example, we have not yet found the means of preventing or curing many of the diseases which continue to plague us. Thus, aggressive, imaginative research, and good public health services must continue to be encouraged.

The cost of serious illness can jeopardize the future of the average family almost as much as the illness itself, and in many areas of the country, the necessary medical facilities and personnel are not available to enough people. Thus, two major problems in medical care are cost and distribution.

To meet these problems, this Administration proposes a continuation of present health and related programs, and in addition has called for: (1) a limited reinsurance program to backstop new and venturesome voluntary health insurance plans capable of offering broader health protection, (2) additional appropriations for and the amendment of the Hospital Survey and Construction Act to bring emphasis to several weak spots in hospital coverage, (3) a new and simplified formula for the distribution of Federal grants-in-aid of State and local health services which will be more responsive to each State's peculiar needs, and (4) a revitalized rehabilitation program capable of returning more handicapped persons to employment.



HEALTH-REINSURANCE

Although health insurance is comparatively new to us, Americans have, for many years provided themselves with many kinds of insurance to cover the risk of catastrophic loss. We insure our homes, places of business and personal belongings against the risk of fire, robbery and theft; against wind and hail storms, earthquakes and falling aircraft. We provide ourselves with employers' liability insurance, and with liability and property damage insurance because of the risk involved in the operation of our automobiles. We insure our lives against the risk of death. There is

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Presented at Conference of the Missouri Health Council, Governor Hotel, Jefferson City, April 30, 1954.

nothing mysterious about insurance; it is merely a matter of joining together to share the risk.

The private companies, the nonprofit carriers, and prepayment medical expense plans have experienced remarkable growth in recent years. For example, in 1939 there were only 8 million persons in the United States who had some kind of health insurance or prepaid medical or hospital expense, whereas now more than 92 million of our citizens have some such protection. The Federal reinsurance service as proposed is designed to encourage private companies and nonprofit insurance organizations to enter news areas and to offer greater insurance protection. The objective is to stimulate further experimentation in new types of insurance policies, with increased benefits and coverage, and also to make insurance protection available to a larger extent in rural and other areas and to aged persons or other groups and individuals where such protection is not now readily available. In short, its purpose is to speed the day when those now insured may have broader, more comprehensive coverage, and at the same time those not now insured will have plans available to them so that all who are able and willing to prepay their medical and hospital expenses may have an opportunity to do so.

The health reinsurance plan as proposed would work about as follows: A private health insurance plan qualified or approved by State law and financially sound could make application for a Federal reinsurance contract. It would pay into the Federal reinsurance fund a small fraction of the premium it received from those who availed themselves of the coverage. In return for the reinsurance premium the fund would insure—that is agree to pay—75 per cent of the abnormal loss incurred directly as a result of the broadened coverage.

Although the bill authorizes a line of credit or a call upon the United States Treasury for $25 million as a capital advance, the fund would consist chiefly of the reinsurance premiums paid into it, together with earnings, and is intended to be self-supporting.

It would not compete with the insurance industry. It would merely aid private enterprise to venture further in this comparatively new field and thereby strengthen the whole hospital-medical insurance system. No one has claimed or will claim that all health problems will be solved by this or any health insurance plan but it is none the less a vital part of the Administration's health program, suggested by the President in his health message, based upon his conviction that voluntary prepayment health insurance is the best means of providing individuals with the protection they need against the cost of illness.

HOSPITAL CONSTRUCTION

The Hospital Survey and Construction Act wherein the Federal Government matches State and local dollars in the construction of hospital facilities was first enacted in 1946. Since that time more than 2,100 projects with 102,000 hospital beds have been constructed with Federal assistance.

In Missouri there have been 28 such projects constructed or approved at a total cost of $38,806,000, of which the Federal Government contributed $15,333,000, the State and local contribution aggregating $23,473,000.

Of the hospital beds constructed in the past, more than 90 per cent have been in general hospitals. While we do not propose to discontinue general hospital construction, it is considered to be timely for us now to give more attention than we have in the past to meeting the need for specialized types of hospitals in such fields as chronic illness and nursing homes. To reach areas of unmet need it is proposed to broaden the Hospital Survey and Construction Act. The pro-

Name of Institution	*Location*	*No. of Beds*	*Total Cost*	*Federal Dollars*
Chillicothe	Chillicothe	20	419,588	209,794
Pemiscot Co. Mem.	Hayti	56	541,552	178,062
Independence San. Hosp.	Independence	30	530,092	264,944
St. Lukes	Kansas City	120	2,451,373	1,153,798
Kansas City General	Kansas City	82	1,037,521	518,760
Menorah	Kansas City	132	2,558,044	482,697
Dunklin County	Kennett	65	947,194	314,731
Coll. Osteo and Surgery	Kirksville	100	1,055,989	351,996
Pike County	Louisiana	22	435,421	217,710
John Fitzgibbon Mem.	Marshall	51	828,518	414,259
Audrain Hospital	Mexico	65	1,164,748	582,374
Sullivan Co. Mem. Hosp.	Milan	52	567,043	282,000
St. Vincents Hosp.	Monett	45	823,629	401,814
Mo. St. San. and Train. SC	Mount Vernon	69	453,995	226,997
Nevada City	Nevada	34	453,696	146,667
Perry Co. Memorial	Perryville	55	624,791	204,595
Phelps Co. Pub. Mem.	Rolla	58	701,876	223,575
City	Springfield	51	310,000	155,000
St. Johns	Springfield		7,357,826	3,639,028
Burge	Springfield	115	894,716	435,658
Evangelical Deaconess	St. Louis	156	1,958,000	734,250
Depaul	St. Louis		2,766,900	1,383,450
St. Louis Childrens	St. Louis		2,957,962	813,440
Lutheran Hosp.	St. Louis	190	3,832,548	574,954
Renard-Washington Univ.	St. Louis	100	1,580,575	786,094
Lincoln Co. Memorial	Troy	50	628,353	314,176

In addition, there have been similarly constructed throughout the United States more than 400 health centers, two of which are in Missouri. These are:

Name of Institution	*Location*	*No. of Beds*	*Total Cost*	*Federal Dollars*
Jefferson Co. H. C.	Hillsboro		91,614	45,807
St. Louis Hlth Centers	St. Louis		832,747	276,171

posal is to provide Federal assistance in building nonprofit hospitals for the care of the chronically ill; nonprofit nursing and convalescent homes; nonprofit comprehensive rehabilitation facilities for the disabled, and diagnostic and treatment centers for patients not requiring hospitalization. Assistance would also be provided to the States in surveying their needs for these types of health facilities. The House has passed the bill sponsored by the Administration and there is every expectation that the Senate will take like action in the next sixty days. Although the existing hospital construction program will continue, there will be new earmarked funds directed for the four part expansion.

NEW GRANT-IN-AID FORMULA

The President has proposed a new simplified legislative arrangement for grant-in-aid programs which would be applied in the fields of public health, child health and welfare, vocational education and vocational rehabilitation. While these programs are primary responsibilities of the State, the Federal Government has been providing limited financial assistance. At present in the health field Federal grants are available in such categories as tuberculosis, venereal disease, cancer, heart disease, etc. Under the new approach the categories would be abolished and Federal dollars would be available for such health services and in such proportion as the State determines. Under the new approach support grants to maintain existing services would be allotted to States on the basis of their population and financial capacity, as measured by per capital income.

Extension and improvement grants for new or extended services would be allotted on a basis of population only, while special project grants would be allotted only after a determination that the project proposed in a State plan is one of national or regional significance and deserving of support as such. In my opinion, the new approach would:

Simplify and make uniform formulas for apportioning grants.

Provide States with more flexibility, an opportunity for greater, and broader initiative responsibility in these programs.

Make Federal assistance more responsive to the needs of the States.

Enable Federal appropriations to be more clearly related to the Federal objectives underlying the grant-in-aid programs; and

Encourage the States to broaden and strengthen their services to the people.

VOCATIONAL REHABILITATION

The Administration's health program would be incomplete unless steps are also taken to deal with the large number of persons who drop out of the labor force each year as a result of illness or some disabling injury. Vocational rehabilitation is the process which has developed to assist an individual whose disability causes him to lose his job or prevents him from assuming a position in productive employment. Among the services utilized, as needed in the particular case, are medical, prosthetic devices, training, transportation and subsistence, occupational tools and equipment, placement and follow-up. It has been estimated that as many as 250,000 persons disabled by disease, accidents, or congential conditions seek, or are eligible to seek vocational rehabilitation each year and that, under the present program, only about 60,000 such persons can be rehabilitated annually.

The President in his special health message to the Congress, on January 18, recommended a progressive expansion of the rehabilitation program. It is proposed to increase it progressively in order to allow for the time required to "tool-up," that is to expand facilities and to increase the supply of trained personnel. The objective is to increase the number to 70,000 to be rehabilitated in 1955; 100,000 in 1956, and progressively thereafter until, in 1959, we may rehabilitate at least 200,000. A bill has been introduced, S. 2759, under which the President's proposals could be carried out and it is in fact a substitute for the existing vocational rehabilitation law, and if passed will be effective July 1 of this year.

The legislation would provide the same new three-part grant structure recommended in the fields of public health, child health and welfare, and vocational education.

It would also broaden the scope of the program by authorizing Federal financial participation in facilities and services essential to a well-rounded rehabilitation program which are not permitted under the present Act.

Finally, the legislation would increase State and local responsibility and flexibility in the administration of the program, with a corresponding reduction in Federal controls.

These legislative proposals affect, of course, all Americans. However, they have special significance for people who live in rural areas in Missouri and throughout the country. The reinsurance proposal should encourage experimentation in the extension of good health insurance plans to people in rural areas who, as of today, are less favored than their urban neighbors in the matter of availability of this form of insurance. Rural areas in need of chronic disease hospitals, nursing homes, and diagnostic or treatment centers will receive special priority under the amendments to the Hospital Survey and Construction Act which the Administration proposes in like manner as hospitals in rural areas have received high priority under the present program.

The Administration's proposals in the fields of public health and vocational rehabilitation are also of special significance to rural areas in the increased emphasis the proposed legislation puts on extension and improvement of services. The greatest need and greatest opportunity for extension and improvement of our health programs is among people in the less thickly populated areas of the country where the services are all too frequently not available at all or available only on an inadequate basis.

The Administration proposals which I have discussed today cannot solve the many health problems confronting us. It is not the proper function of the Federal Government, or for that matter State or local government, to do for the people that which they can do for themselves. There are, however, in the health field problems of great proportion which seem to call for teamwork between all levels of government and individual citizens.

In the words of Mrs. Hobby—

"Your voluntary agencies and associations offer more opportunities for direct citizen participation than do most Government programs. You are closer to the people and can see their changing needs more quickly than may be possible for us. This frequently enables you to adjust your programs more quickly to meet these changing needs.

"Our continuing cooperation . . . for the common good is to my mind one of the strongest guarantees of future progress for human welfare. I wish all of you even greater strength in the years ahead, that you may render even more distinguished service."

About the author: Mr. Banta was born in Berryman, Mo. He received his law degree at Northwestern University in 1914 and practiced law in Ironton, Mo., almost continuously from that time with the exception of a few intervals of government service. He served as administrator of the State Social Security Commission of Missouri from 1941 to 1945 by appointment of Governor Forrest Donnell. He was elected to the U. S. Congress in November 1946 to represent the Eighth Missouri District. He was appointed General Counsel, Department of Health, Education and Welfare April 11, 1953.

Healthy, Wealthy or Wise?

Frank Carolan Discusses Facts and Some of the Reports on Britain's National Health Service

I HAVE TO FACE three forbidding factors in considering the success or otherwise of Britain's National Health Service. One is a group of dispassionate statistics, which seem to confirm the excellence of the service, the other a series of facts issued by the Government which also are mainly favorable and on the other hand two very recent and highly derogatory Press reports which in themselves condemn heartily the human aspect of certain operative functions of the Health Service.

Before I go into details let me say at once that my political leanings are against all forms of Nationalisation for I am a Tory, and Nationalisation was essentially the product of the Socialist Party. And, again, I have been considerably further influenced by my stay in this Country where, in my opinion, your present very high standard of living stems essentially from the ideal that every person is an individual with his own complete freedom of choice and operation.

Let us look at a few, a very few, figures first; these are necessary in order to consider the over-all picture in its complete detail.

About 90 per cent of the doctors in the United Kingdom joined the service in 1948 when it was inaugurated and about 95 per cent of the population entered the lists of these doctors: no doctor or member of the public is compelled to enter the service, but it will be fairly obvious to most of you that both the doctors and those of the public who remain without the scheme possess more than the average citizen in the way of worldly wealth.

The doctors having the rich established practices are in those residential districts where the patient can afford to foot his heavy bills. No doctor may have more than four thousand patients on his list because it is argued any number in excess of this figure could not be dealt with efficiently; personally I would be inclined to divide this colossal figure by three and even then remain dubious of good results materialising. It is pointed out that very few doctors have four thousand patients in the memorandum I have in front of me.

As a doctor is paid according to the number of patients he has on his list (and again I must raise a big question as to the wisdom of this type of incentive which seems to me to make a "Recruiting campaign" feasible, instead of emphasising the efficiency in handling the patients) it is argued that the inefficiency or slothful doctor would rapidly lose his patients, since a patient may re-register with another doctor after giving fourteen days notice to quit his present doctor: but, what happens if the patient lives in a rural area and another doctor doesn't live within miles? Is he to balance time, so often the factor in an urgent case, against efficiency?

The Service is all-embracing in its comprehensiveness, and for approximately 46 cents per person per week the people in Britain one can receive without further cost practically every medical care imaginable including mid-wifery, hospitalisation and the aid of a specialist, if necessary.

Into the scheme are incorporated those aids supplied by an optician and a dentist, but one is required to pay 50 per cent costs on glasses when needed, and a dentist "extracts" $3 for any treatment given over and above examination, but this $3 covers all possible treatment on natural teeth: however, if false teeth should be required a further 50 per cent of the total cost has to be paid.

There are certain other minor charges (such as 50 per cent cost for wigs) which were mainly brought about because of the huge demand for these specific articles. Any doctor's prescription to a Chemist's (Drug Store) would always require a payment of about 14 cents by the patient.

How is the service working? On the whole it is supposed to be working very well, But!!

Take the case of the man I was reading about the other week, who had a stomach ailment requiring an operation, not, I believe, a very serious affair if it had been treated promptly. This man had to wait seven months before a bed could be found for him, and at the subsequent inquest, for the man died, the doctor stated that the situation was not unusual, in that industrial area.

(Then again, take the case of a dying man where an attempt was made to get him into four different hospitals in the industrial Midlands of England. No hospital would accept him because certain procedures were not followed, and he, too, died. As one newspaper editorial states, "Here is something to make your hair stand on end."). Those were both recent (1954) cases and had nothing to do with the inauguration of the system.

These may be exceptions to the rule, I believe they are exceptions, but when men's lives are at stake there can be NO room or excuse for "Red Tape" or muddle.

To my way of thinking there are two vital factors which must always be borne in mind. First, and foremost, every scheme no matter how small or localised demands that the human values utilised be of the highest quality, for if subsequently humanity fails

(Continued on page 697)

Reprinted from the Mexico Ledger, April 19, 1954, with a byline "By Frank Carolan, English Exchange Teacher."

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Digitalis Glycosides

JESSE D. RISING, M.D., *Kansas City*

Times have changed a lot since William Withering separated crude digitalis from the Shropshire witch's brew; now it seems that chemists have extracted a witch's brew from digitalis, so numerous are the glycosides that are being advertised to the medical profession. The multiplicity of gylcosides is more apparent than real because digitoxin alone goes by no less than six different names (table 1). On the other hand two different glycosides masquerade under one name, strophanthin, sometimes with tragic consequences.

TABLE 1.
PREPARATIONS OF CARDIAC GLYCOSIDES

Glycoside	*Proprietary Name*
Digitoxin, U.S.P.	Cardigin Crystodigin Digisidin Digitaline Nativelle Digitoxin Purodigin
Gitalin, N.N.R.	Gitalin (amorphous)
Lanatoside C, U.S.P.	Cedilanid, N.N.R.
Digoxin, U.S.P.	Digoxin
Lanatoside Mixture	Digilanid, N.N.R.
Ouabain, U.S.P.	Ouabain Strophanthin-g* G-strophanthin*
Strophanthin, N.F.	Strophanthin, Kombe Strophanthin-K

*Not to be confused with strophanthin, N.F. (Strophanthin-K). This product is twice as potent as the official strophanthin, and should be called by its official name, ouabain.

Gross misconceptions about the actions of the various glycosides also confuse the picture. Some of them are credited with pharmacologic and therapeutic actions that differ from those of whole-leaf digitalis or any of the other glycosides. It is also commonly stated, and widely believed, that the glycosides are much more rapidly effective than the whole-leaf preparations. These ideas, to put it simply, just are not so. The glycosides of digitalis have in common with each other and with the whole-leaf the ability to do the same things: (a) increase the force of systolic contraction of the failing heart muscle, and (b) depress the conduction system of the heart. They also increase the irritability of the myocardium, but this is a toxic rather than a therapeutic effect. The glycosides do have some pharmacologic differences, however, and these include: (a) potency, (b) absorbability from the intestinal tract, (c) speed of onset after they reach the blood stream and (d) duration of action.

TABLE 2.
PHARMACOLOGIC PROPERTIES OF CARDIAC GLYCOSIDES

Preparation	*Onset of Maximal EKG-Effect**	*Duration of EKG Effect*	*Degree of Intestinal Absorption*
Digitalis leaf	10 hrs.	over 72 hrs.	20%
Digitoxin	10 hrs.	over 72 hrs.	100%
Gitalin	8 hrs.(?)	72 hrs.(?)	50%
Digilanid	3 hrs.	72 hrs.	65%
Lanatoside C	1½ hrs.	24 hrs.	irregular
Digoxin	1 hr.	24 hrs.	80%
Ouabain	10 min.	8 hrs.	poor
Strophanthin	10 min.	8 hrs.	poor

All values are approximate.
*Intravenous administration.

Much has been made of the potency of some preparations, but this is not of prime importance so long as the dosage is properly adjusted and so long as the price of the drug is not particularly high. In other words it does not matter whether a given effect can be obtained by the use of a milligram of one drug or a hundred milligrams of another drug, providing the difference in the cost is not great. Of more importance is the therapeutic ratio, that is the ratio between the usual therapeutic dose of a given drug and its usual toxic dose. There is no good evidence that any of the cardiac glycosides has an advantage over any of the others in this respect.

The other pharmacologic properties that are of importance deserve consideration, but for the most part their implications are obvious. For example: digitoxin, which is nearly 100 per cent absorbed, will have about the same dosage either by mouth or by vein, while glycosides which are as irregularly absorbed as strophanthin and ouabain should never be administered by mouth. It will also be apparent that a drug with a long latent period, in other words one with a slow onset of action (such as digitoxin), will not be the drug of choice for the treatment of a patient with acute left ventricular failure and pulmonary edema. For this condition a much more rapidly effective drug, such as ouabain, is indicated. One should remember that, even when given by vein, digitoxin is not what can be called a rapidly effective glycoside.

On the other hand, a drug with a slow onset and a long duration of action may be satisfactory for digitalizing the average patient with heart failure, and will usually be the drug of choice for maintenance therapy. Table 2 gives approximate speed of onset and duration of action of most of the important cardiac glycosides. It should be noted that the rapidly effective members of this group have short duration whereas those of slow onset have a prolonged effect.

It is frequently stated that the physician should become familiar with one preparation of digitalis, learn to use it well, and use it to the exclusion of all others. So long as there are available drugs of such diverse pharmacologic properties this seems to be a rather illogical attitude. It would be more rational to become familiar with at least two cardio-tonic glycosides, a rapid acting one and a slow acting one. Some physicians will also desire to use drugs of an intermediate speed and duration such as digoxin or lanatoside C.

Most patients can be digitalized with slow acting glycosides or with whole-leaf digitalis. Even fairly rapid digitalization can be attained with these drugs, it being possible to accomplish virtually complete digitalization within twenty-four hours. Occasionally, however, as in the case of acute ventricular failure, the physician will need to use a drug which will digitalize the patient extremely rapidly. Ouabain is indicated at such times because it is possible to effect complete digitalization within a matter of minutes instead of hours.

Inasmuch as digitoxin is so well absorbed by mouth, and also because of the fact that even though given by vein it is not particularly rapid in its onset, it is apparent that there are few indications for the parenteral injection of this glycoside. The preferred route of administration is by mouth; if it is necessary to use injections the drug should be given by vein. The glycoside is too irritating to admit satisfactory intramuscular administration, and the vehicle in which it is dissolved contains about 50 per cent alcohol. The usual digitalizing dose is 1.2 to 1.8 mg.

Ouabain, on the other hand, is poorly absorbed by mouth and should be given only by parenteral injection. Its effects are so rapid that it can almost be titrated on the patient. Because of its potency only a small amount of the glycoside is required for digitalization so that irritation from the drug is minimal. In addition to this the ampul of ouabain contains no alcohol. For these reasons it is possible to administer ouabain by intramuscular injection as well as by vein. The usual digitalizing dose is 0.25 to 0.5 mg. if the patient has received no digitalis in the preceding two weeks.

In conclusion: The physician now has at his command many purified digitalis glycosides which have an advantage over whole-leaf digitalis because of their uniform potency. The various members of the group also have individual pharmacologic properties which allow greater therapeutic flexibility. No one glycoside is better than another; it is only different. If these differences are understood by the physician he will be in a position to give his patient the best treatment that modern chemistry places at his disposal. One should remember that there is no such thing as a standard digitalizing dose of any of the drugs. The dose of digitalis is "enough," and this amount must be determined for each individual patient.

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Every man owes a part of his time and his money to the profession in which he is engaged.—THEODORE ROOSEVELT.

Among Ourselves

(Editorially Speaking)

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Intern Black Market?

Prior to WW-II the number of young physicians who yearned for prolonged postgraduate training comfortably filled the berths available. To be sure, some could not get postgraduate training exactly where and when they wanted it. However, the balance between supply and demand was reasonably well maintained.

After the war, most younger physicians felt it was time "to strike while the iron was hot." In other words, they had seen special and preferential treatment given to medics with Board ratings, both in and out of service; it looked like a good go. Besides, Uncle Sam was helping out financially; with a wife and family, this naturally was a powerful argument.

Consequently, after the war it was not unusual to see residents and assistant residents figuratively walking all over each other looking for something to do in these "postgraduate facilities," particularly in "teaching" or quasi "teaching" institutions. In one such institution, the roster of residents, assistant residents and interns on one service for a time literally outnumbered the patients; and the residents-assistant residents outnumbered the interns by a figure of almost two to one!

At that time, the ivory-tower functionaries promised non-teaching hospitals to split up or to dole out interns and residents—this they never actually did; the lure of a "teaching service," tantamount to Board preparation, proved too great. The non-teaching institutions hobbled along, fresh out of interns!

Now, the newness has worn off, even the heads of teaching institutions are sweating. Why? The power of the hidden dollar!

On paper, the non-teaching hospitals pay their interns the going rate, we understand. But some of the "boys on the staff" make little gratuïtous honoraria or bonuses which substantially increase the "take-home pay" to our neophytes—hence, the present situation.

This seems like a peculiarly sinister indoctrination for these professional youngsters, to become immediately a part of under-the-table financial transactions, hardly helpful to their future moral integrity. But, that's the way it's done, so they say. A black market in interns? Or gray?

VINCENT T. WILLIAMS, M.D.

H — — — Day

Future wars may well prove to be wars of evacuation and movement, particularly relative to the civilian population of our strategically located large cities. On the occasion of such an emergency the resultant casualties in the fringe areas as well as those caused by the panic and confusion of rapid evacuation would require immediate medical care. In the event of a hydrogen bomb attack all hospital facilities in a given area could be completely and utterly wiped out in one stroke.

To meet such an emergency the Federal Civil Defense Administration has ordered 200 portable hospital units each of 200 bed capacity. An additional 90 units have been ordered for states and cities under the matching program. Each unit will cost $26,435.17 and will be patterned after the mobile army surgical hospital unit so successfully operated behind the front lines in Korea. A complete hospital unit weighs about 13.5 tons and can be transported in a single van. The estimated personnel requirement per unit would be 10 physicians, 20 nurses, 125 trained and 75 untrained auxiliaries. Each unit would include five folding operating tables, 200 folding canvas cots and a portable x-ray unit.

This entire national set up would have a bed capacity of only 50,000, a mere drop in the bucket if a real emergency should arise. Hundreds more, and possibly thousands; of these units may be required on "H-ell Day."

What a wonderful opportunity for industry to purchase and contribute hospital units of this type in their respective communities. The cost could be charged off to advertising. What a wonderful public gesture this would make.

What a particularly apropos opportunity for labor to display its interest and public-spirited sentiment for the welfare of our nation as a whole. The welfare of our nation could be materially and psychologically elevated by any "interest" John L. Lewis might contribute to this plan.

Martyn Schattyn, M.D.

Dioscorides

In the Smithsonian Institute there is a tribute to Dioscorides. He spent several years with the Roman army during its invasion of Asia Minor. At this time particularly he examined roots, stems, leaves and seeds of the plants and herbs along the way, noting their many characteristics and observing their medicinal properties. Our pharmacopoeia has, in the past, been based largely on his work, and has remained pretty much unchanged for centuries until the turn of the last century. This shows how static we have been. Now, vitamins, antibiotics, the antithyroid drugs, the radioactive preparations, the anticoagulants, make the works of Dioscorides partially obsolete, although a lot of good still remains in them.

F. T. H'Doubler, M.D.

McCarthyism in Medicine?

Dissension, fear and suspicion have infiltrated our national life to an unusual degree and medicine is apparently not exempt from this basic pattern. We have on the national scene the picture of the general practitioner arraigned against the surgeon, our two largest surgical groups at loggerheads and the medical social planners versus the rugged individualists.

We are a nation of pressure groups and the medical profession is no exception.

Fortunately for the physician, as long as he gives good medical care of his people, answers the night call promptly and makes a reasonable charge for his service, he can go serenely on his quiet way, ignoring the hullabulu, tending his garden and flowers and slipping away fishing when the opportunity presents itself.

Avery P. Rowlette, M.D.

What Is Your Hobby, Doctor?

(Continued from page 634)

already being felt in many quarters. At that time I wanted to begin with an exhibit for the American Academy of Orthopedic Surgeons, and began my quest for more information which might interest these specialists in something besides the treatment of these injuries; namely, some action in regard to their causation and prevention.

This started an intensive correspondence with others interested in this work, which began with Fletcher Woodward, M.D., who was kind enough to send me a mass of material which he had accumulated several years previously when he wrote his significant papers for the J.A.M.A. and other journals. I boiled this down, and followed it up personally by writing to all of his former correspondents; including all kinds of organizations and individuals. Of the latter, none influenced me more than A. W. Stevens of Boston (SAE), who first gave me the idea of "inhuman" ingredients through several interesting letters; namely, automotive and design failures as causes of injury and death. Secondly, I received a great deal of help and encouragement from the Cornell Crash Injury Research group, and am still in correspondence with groups who are actively engaged along similar lines of investigation.

From this point on it was not difficult to reorient one's thinking along lines of cause and prevention, aside from the human faults at work. In other words, it soon became evident to me that accident and injury are not synonymous. Traffic safety consists of human failures (accidents) and inhuman injuries from failure of engineering and design. Both must be clearly differentiated. Obviously, I began to champion the inhuman elements in every way I could and began to concentrate on medical groups last December at St. Louis for the A.M.A. session. I was on the program of our state meeting and will exhibit in New York this month. I hope to exhibit at the Southwest meeting and also before the Academy of Orthopedic Surgeons in Los Angeles next January.

I know that all of this has sounded like a lot of sound and fury, and it has been just that and will continue to be so until something more interesting and urgent comes up to replace this absorbing activity. At the same time I have had a lot of fun doing all of this, because it introduced an entirely new philosophy of trauma, a new interest in motoring and a new automotive literature. I suppose every orthopedist considers himself to be more or less of a human engineer. This approach has been a natural as well as an interesting one then to me.

To show how much my exhibit has grown in just one year: it will take up more than 45 feet at New York, and I have material spilling over.

(Continued on page 698)

Fraternally Yours

Notes on San Francisco—A.M.A. Meeting

Your reporter took the leisurely, lazy way out; stop-off at Grand Canyon . . . A grand Grand site, or sight . . . Let Fred Harvey arrange it; meals, tour service, courtesy, all just as you want it . . . The lay-over in L.A. about what you'd expect: Big, boisterous, braggart; full of bounce . . . Don't miss Knott's Berry Farm, ghost-town; good gimmicks for kids and grown-ups . . .Take-it-or-leave-it, the Hollywood tinsel; if adult-serious, the Huntington Memorial set-up is tops . . . Otherwise, keep going, skip L.A. . . .

On the way to L.A., Santa Fe goofed, 6 hours late, crumbed a half-day . . . Oh, to be an O. Henry . . . man-and-wife late for only daughter's wedding; ditto Pullman porter's daughter's graduation . . . Lots of material for Wm. Sidney Porter's forte, the fully-packed vignette . . .

Sunday session at the Palace Hotel, arranged as the "Conference of Presidents and Other Officers of State Medical Associations," pretty much a so-so monotonous affair, according to those there . . . Civilian Defense session mostly more of the same, although the latter a news-worthy event, if for no other reason than to show we "don't know nuthin' from nuthin' " about the whole damn business . . .

We chose a Greyhound rubber-neck session; just as enlightening and a helluva lot cooler . . . 'Frisco headlines: "7 FELLED BY HEAT"; and the "outrageous" handling of medics, no-good reservations; allegedly 150 of our boys left out in cold with dough paid in advance—"no rooms"; quite a hot, hectic, stinky, sticky opening . . . Some threatening grumbles about "never again another A.M.A. in Frisco," mebbe . . .

After Sun-Mon thermidor treatment, from Tues on, "You'll need a wrap at night" temp took over; veree niz . . . New canvas marquee gadget for registration (and some exibs), in front of Civic Auditorium, a perhaps in efficiency . . .

As usual, the show a multi-ringed circus . . . The House of Delegates (at Palace Hotel), hard-pressed for a burning "issue," a *sine qua non* of any session, picked on the Kaiser and N.Y. Health Plans . . . No "free choice of physician" was brought up, dusted off, hot-aired, and gave the boys something to dither about . . . Curiously, each session must have something red-hot on the surface, which peters out to luke-warm (as it did in this and in other affairs) . . . Seems like the planners have to figure out some straw-man they gotta lick, or the meeting can't go on . . .

The scientific lectures, the exhibits (both commercial and scientific) were many; some mediocre, some worthwhile, and some sorry, as usual . . . Headlines (on ciggies-cancer of lung) sent tobacco stocks tumbling on Big Board, and brought the first sellout (of cigs) in history of certain niteries, mostly occupied by medics . . . Photos of this news-handout showed one guy with cigar, another with ciggie . . . Porter in medic bldg swears his hardest job "is to clean up ash-trays"; ex-Pres. McCormick states he'll keep up one-pack-a-day pace . . . Most went merrily on smoking; figgered they'd bathed their lungs in nicotine-tar for 2-3 decades, either they were or they weren't exposed; the Auxiliary (at F'mount) had Kents, thank you . . .

Examiner handled news neatly; one legman covered the politics at the Palace Hotel (H. of D.); another covered science; these items appeared paired in twin, front-page columns . . . A true appraisal: Half-and-half, scuttlebutt and science . . . Also, daily editorials welcomed, and apologized, for S. F. . . .

Babcock, of Philly, was named Practitioner of Year; Martin, of Virginia, went in as President, succeeding McCormick of Toledo . . . TV and radio show at inaug gave all the "high and mighty" a chance to put on their stuffed-shirt clothes; they appeared duly stuffed, uncomfortable . . . Completely like senior-class play actors carrying out none-too-well rehearsed roles . . .

Attendance *circa* 11,000; Elmer Hess (well known to Missourians), our new Pres-Elect . . . Lots of sore feet, a few maudlin with spirits . . . Many at side-shows, night and day; in fact, every rubber-neck side-show had a quorum of bronze and celluloid buttons . . .

A great city for conventions; not too, too commercial; lots of variety in food, nationalities, places to go and to see . . . Leavenworth St. next to Dept. Int. Rev.—suggestive? . . .

Many MoMedics around, in science, in politics, in fun-places; a healthy combo, a reasonable distribution . . . Despite griping, grouching and grumbling, a satisfactory meeting, and, we predict, we'll repeat on the same lot . . . (Guess what, after we'd written this, we read these scareheads: "A.M.A. Picks S.F. for '58.") So there you have it!

V. T. W.

A Safer GU Anesthetic

. . . benzocaine is an excellent topical anesthetic agent when concentration of at least 10 per cent can be obtained. The low solubility of the substance has prevented the prior use of this drug in concentrations greater than 2 or 3 per cent. . . . A 10 per cent solution of benzocaine dissolved in a series of carbowaxes has . . . been both a safe and effective agent in the topical anesthesia of the urethra prior to urethral instrumentation.—J. E. Byrne, M.D., St. Louis, *Surgery, Gynecology and Obstetrics.*

Missouri Medical Meetings

Southern Medical Association, St. Louis, November 8-11, 1954.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Kansas City Southwest Clinical Society Conference, Municipal Auditorium, Kansas City, October 4-7, 1954.

Missouri Academy of General Practice, Governor Hotel, Jefferson City, October 27, 28, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—first Friday of each month at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

According to Sparky Stalcup, state March of Dimes chairman, $724,338.72, or nearly three fourths of a million dollars, was spent by the Missouri Chapters of the National Foundation for Infantile Paralysis for polio care in 1953. This amount spent for patient care includes hospital, special nursing, doctors' fees, braces and other medical costs. Direct recipients of this expenditure were 2510 patients. He further reports, "Of the total expended to assist families who needed help, 72 per cent, representing 1,997 cases, was for those who contracted polio during or prior to 1952. This reflects the high continuing costs of polio treatment and the large number of cases of the large 1952 epidemic." The Missouri University basketball coach says that the financial requirements of the Foundation's polio provision program, utilizing gamma globulin and a tried polio vaccine, has seriously reduced funds available for patient care and other charter expenditures.

Doctors in twelve rural Missouri counties, typifying all rural sections of the state, are being asked to begin maintaining certain records on medically indigent patients as of August 1, 1954. This request is in relation to the state-wide medical and hospital indigency survey now under way. The study is being made for the Missouri Health Council by the Institute of Research at the University of Missouri. The doctors in the twelve counties (Butler, Cape Girardeau, Crawford, Harrison, Jefferson, Laclede, Lewis, McDonald, Ozark, Polk, Schuyler, Vernon) are asked to keep the requested records during the period August 1, 1954, to February 1, 1955. Cooper County doctors, in a pilot study, have been keeping similar records for a six month period which began February 1, 1954.

The State Association's Committee on Health and Public Instruction will again sponsor a health exhibit at the Missouri State Fair. This will be the sixth consecutive year the Committee has used the State Fair at Sedalia as a medium for health education. The Fair dates are August 21-29, 1954. The exhibit to be displayed this year is a new one recently developed by the Bureau of Scientific Exhibits of the American Medical Association and is on heart disease. The display will be located in the Educational Building, just back of the grandstand.

Members in the News

Joplin's **John B. Sutphin**, M.D., is now a Fellow of the American Academy of Pediatrics.

Women of the Quaker Oats Company recently heard **John W. Koehler**, M.D., Joplin, speak on heart disease.

Newly elected members of the Missouri Heart Association are: **J. Will Fleming, Jr.**, M.D., Moberly, president; **F. Stanley Morest**, M.D., Kansas City, secretary; and members of the board of directors, all from Kansas City, **A. Graham Asher**, M.D., **A. Morris Ginsberg**, M.D., and **Don Carlos Peete**, M.D.

From O'Fallon, Illinois, Dr. **Charles Shumaker** has joined the staff of State Hospital No. 4 at Farmington. Dr. Shumaker is a graduate of Washington University, and did psychiatry at St. Louis City Sanitarium (now St. Louis State Hospital) for fifteen years prior to entering private practice in Illinois.

DePaul Hospital intern, Dr. **Leonard F. Podrebarac**, is the recipient of one of the $1,000 General Practice Scholarships offered by the Mead Johnson Company. The award is to be used to help defray the expenses of a year's training in general practice residency.

In Cassville, satisfactory progress is being made on the new office building of **A. A. Mickel**, M.D. The office space, all of which is air-conditioned, will make available nearly 1,500 square feet of floor space.

The current *Quarterly of Phi Beta Pi* features Mu Chapter of Washington University Medical School.

The Kansas City Heart Association heard Edgar A. Hines, Jr., M.D., of the Mayo Clinic speak at their annual meeting. At the meeting **Harry M. Gilkey**, M.D., was cited for his work as medical director at the Children's Heart Camp. Retiring president **F. Stanley Morest**, M.D., was also cited. Newly elected officers were **T. Reid Jones**, M.D., president; **William L. Mundy**, M.D., president-elect; **Michael Bernreiter**, M.D., and **V. Bryce Ballard**, M.D., vice presidents.

Kansas City physicians **Frank L. Feierabend**, M.D., **John A. Growdon**, M.D., and **Hubert M. Parker**, M.D., have recently been elected to positions in the Blue Cross-Blue Shield Board.

The K. C. Academy of General Practice named **Charles W. Rose**, M.D., General Practitioner of the year. Due to Dr. Rose's illness, the award was accepted by his wife. Officers installed at the meeting were **Hugh A. Gestring**, M.D., president; **Richard R. Becker**, M.D., president-elect; **E. C. Carrier**, M.D., secretary; and **Mary C. Cortner**, M.D., treasurer.

A.M.A. director W. W. Bauer, M.D., was the featured speaker at the Buchanan County Medical Society fiftieth anniversary dinner early in June. Dr. Bauer spoke on "Medical History in the Making." The honored members of the Society were Drs. **Floyd Spencer**, **T. M. Paul**, **J. M. Bell**, **W. E. Pentz**, and **H. E. Petersen.**

The Kansas City home of **W. M. Ketcham**, M.D., was one shown on the Wellesley Garden Tour late in May.

Harding College president, Dr. George Benson, spoke to the Baptist Memorial Hospital group in Kansas City. Construction on the three-hundred-bed unit which was started last November is making satisfactory progress.

H. C. Senne, M.D., St. Joseph, spoke to the wives of the Quaker Oats Company employees. His topic was "Guarding Your Husband's Heart." Typical of the comment following his talk was "remarkable attention . . . way above average as a speaker."

By way of acquainting Pettis County members with their new service by Kansas City Blue Cross, representatives of Blue Cross-Blue Shield spoke to the members in Sedalia in late spring.

The American Association of University Women heard **Sylvia Allen**, M.D., Kansas City, speak on "On Living Together."

Members of the St. Louis County Medical Society and their ladies were guests of Eli Lilly and Company in Indianapolis on a three day trip late in June.

President-elect of the Missouri Public Health Association is **Ralph Emerson Duncan**, M.D., Kansas City.

"The Story of an Operation (Gastrectomy)," by Robert M. Moore, M.D., professor of surgery at the University of Texas, was the subject of the fifth annual Dr. F. G. Thompson lectureship in St. Joseph.

At the Missouri Military Academy, **D. M. Nigro**, M.D., Kansas City, director of the Knute Rockne Boy's Club received a plaque honoring his work with youths.

The Kansas City Society for the Hard of Hearing heard a warning about antibiotic ear drops by **P. A. Barelli**, M.D.

A fund for research and education at Menorah Medical Center, Kansas City, was started in honor of the golden wedding anniversary of Mr. and Mrs. Isaac Katz. Mr. Katz is a founder of the Katz Drug Co.

The Buchanan Medical County Medical Society rules have been revised to admit nine corresponding members from surrounding counties, several in Kansas.

Brian Blades, M.D., Professor of Surgery at George Washington University, delivered the annual Hodgen lecture on "Current Status of Hypothermia in Surgery" under the sponsorship of the St. Louis Surgical Society.

The Vincent Park Williams memorial lecture on "Tumors and Cysts of the Neck" was delivered in Kansas City by Arnold S. Jackson, M.D.

After fourteen years as administrator of St. Joseph Hospital, Kansas City, Sister Ildephonse Kelly, R.N., resigned because of ill health and returned to St. Mary's Hospital in Tucson. Her successor is Sister Michaella Marie Buckley.

New president of the Kansas City District Dental Society is Otho Duncan, D.D.S.

Kansas City neurosurgeon **Donald F. Coburn,** M.D., attended a meeting of the Harvey Cushing Society in Santa Fe in late spring.

"Concerto for Piano and Orchestra" by MoMed Editor **Vincent T. Williams,** M.D. was premiered by the Kansas City Conservatory of Music in late spring.

The Kansas City Surgical Society's newly elected president is **Richard H. Kiene,** M.D. **Thomas M. Johnson,** M.D., is secretary-treasurer.

Dr. and Mrs. **James A. Tesson,** Kansas City, attended the meeting of the International College of Surgeons in Turin, Italy.

The Lutheran ministers of St. Louis heard **John J. O'Hearne,** M.D., Kansas City, speak on "The Relationship between Religion and Psychiatry."

On the opening golf day at Rockwood Country Club, Kansas City, **Paul A. Kienberger,** M.D., scored a hole-in-one.

The Clay County Medical Society in Excelsior Springs heard **Victor B. Buhler,** M.D., speak on "M.D.'s and D.O.'s."

At a sales conference of Parke, Davis and Company **Charles Martin,** M.D., St. Louis, spoke on "The Doctor and the Detail Man." The sponsoring company specifically requested that this talk be made by a general practitioner.

On the second birthday of New Faith Hospital, St. Louis, **A. J. Signorelli,** M.D. burned the $150,000 mortgage on the hospital.

The Milan Hospital was cited as the Modern Hospital of the Month in late spring.

Jackson C. Moody, M.D., opened an office in Clinton in early summer.

A new medical building has been constructed in Centralia for **Robert Ward,** M.D., who located in that city in mid-summer.

Kansas City physician **Jacob Kraft** has returned from military service and has resumed practice.

Plans have been submitted to the State Division of Health for a proposed fifty bed Ray County Hospital.

Members of the Robert Jones Club, national organization of orthopedic surgeons, met at Washington University School of Medicine for their annual clinical program. Dr. **J. Albert Key,** professor of clinical orthopedic surgery, was host to the gathering.

"Cerebral Palsy and Brain Damage in Pediatric Practice" was the title of an address by **R. E. Bruner,** M.D., Kansas City, before the pediatric section of the Iowa Medical Society at Des Moines, Iowa.

Appearing on the program of the Southern Society of Anesthesiologists at Miami Beach, Florida, in April, was **Oral B. Crawford,** M.D., Springfield, who spoke on "Comparison of 2-Chloroprocaine With Other Local Anesthetic Drugs."

The Columbia, Missouri Practical Nurses Association, meeting at the University Hospital on May 10, heard **M. Eugene Windmiller,** M.D., speak on "The Duties of Surgical Nursing."

Two members of Washington University School of Medicine faculty took part in a Postgraduate Medical education course in three northwestern Wisconsin communities. Dr. **Henry A. Schroeder** and Dr. **Henry G. Schwartz** gave lectures in Chippewa Falls, Pinecrest Resort and Rhinelander. The three-day series of lectures was arranged by the Wisconsin State Medical Society and others for the benefit of physicians in general practice who could not take consecutive days from their practice for postgraduate education.

Gordon F. Wise, M.D., Springfield, was a discussant at the Burge Hospital Staff meeting recently and spoke on "Cardiac Arrythmias in Anesthesia."

New Members

Bauer, Maria, M.D., St. Louis
Bauer, Otto, M.D., St. Louis
Bercu, Bernard, M.D., St. Louis
Berndsen, Gerard H., M.D., Kirkwood
Brother, George M., M.D., St. Louis
Bukantz, Samuel C., M.D., St. Louis
Carroll, Percy J., M.D., St. Louis
Carter, William W., M.D., St. Louis
Chernoff, Amoz I., M.D., St. Louis
Clark, Kendall A., M.D., Fulton
Daughaday, William H., M.D., St. Louis
Davies, Dean F., M.D., St. Louis
Doisy, Robert A., M.D., Kirkwood
Eagleton, Mark D., M.D., St. Louis
Eisenstein, Albert B., M.D., St. Louis
Erlanger, Herman, M.D., St. Louis
Frazier, Donald B., M.D., St. Louis
Graham, David T., M.D., St. Louis
Gray, Vernon, M.D., St. Louis
Guze, Samuel B., M.D., St. Louis
Harford, Carl G., M.D., St. Louis
Harnagel, Dana Lee, M.D., St. Louis
Jim, Robert T. S., M.D., St. Louis
Kinsella, Ralph A., Jr., M.D., St. Louis
Lamb, Wanda, M.D., St. Louis
Lerwick, Everett R., M.D., St. Louis
Loeb, Virgil, Jr., M.D., St. Louis
Maze, Lawrence E., M.D., St. Louis
Mendeloff, Albert I., M.D., St. Louis
Miller, Charles, Jr., M.D., St. Louis
Moore, Carl V., M.D., St. Louis
Robins, Eli, M.D., St. Louis
Rothweiler, Robert J., M.D., St. Louis
Ryle, Winfred E., M.D., St. Louis
Schroeder, Henry A., M.D., St. Louis
Sharp, Austin R., M.D., St. Louis
Smith, John R., M.D., St. Louis
Thurston, Don L., M.D., St. Louis
Waters, Hugh R., M.D., St. Louis
Werner, Dean F., M.D., North Kansas City
Wheeler, C. J., Jr., M.D., St. Louis
Wittler, Harry A., M.D., Brentwood
Wood, W. Barry, Jr., M.D., St. Louis

In Memoriam

Brossard, P. M., M.D., Maplewood, a graduate of Washington University School of Medicine, 1905; member of the St. Louis County Medical Society; aged 75; died April 14.

Brandon, J. P., M.D., Essex, a graduate of St. Louis College of Physicians and Surgeons, 1903; honor member of the Semo Counties Medical Society; aged 75; died April 18.

Bishop, W. T., M.D., Sedalia, a graduate of the University of Missouri School of Medicine, 1901; honor member of the Pettis County Medical Society; aged 85; died April 22.

Rowe, Alfred R., M.D., Poplar Bluff, a graduate of St. Louis University School of Medicine, 1903; honor member of the Butler-Ripley-Wayne Counties Medical Society; aged 79; died April 26.

Lyman, Harry W., M.D., St. Louis, a graduate of the St. Louis College of Physicians and Surgeons, 1895; honor member of the St. Louis Medical Society; aged 81; died May 6.

Fonda, James W., M.D., Poplar Bluff, a graduate of Creighton University School of Medicine, 1917; member of the Butler-Ripley-Wayne Counties Medical Society; aged 66; died May 14.

Clinton, Lloyd B., M.D., Carthage, a graduate of Northwestern University Medical School, 1917; honor member of the Jasper County Medical Society; aged 62; died May 15.

Wisser, J. J., M.D., St. Joseph; a graduate of Central Medical College of St. Joseph, 1895; honor member of the Buchanan County Medical Society; aged 82; died May 20.

Ockerblad, Nelse F., M.D., Kansas City, a graduate of University of Kansas School of Medicine, 1916; honor member of the Jackson County Medical Society; aged 73; died May 23.

Megee, William K., M.D., Moberly, a graduate of Washington University School of Medicine, 1912; honor member of the Chariton-Macon-Monroe-Randolph Counties Medical Society; aged 69; died May 24.

Bell, John M., M.D., St. Joseph, a graduate of Northwestern Medical College, 1892; honor member of the Buchanan County Medical Society; aged 89; died May 26.

Hofmeister, Rudolph, M.D., a graduate of St. Louis University School of Medicine, 1919; member of the St. Louis Medical Society; aged 64; died April 29.

Dorris, George T., M.D., Illmo, a graduate of Barnes Medical College, 1906; member of the Semo Counties Medical Society; aged 74; died May 5.

MEDICAL SECRETARIES MEET IN FAYETTE

The Missouri State Medical Secretaries and Assistants Society held a two day meeting at Central College, Fayette, on July 17 and 18. A reception and dinner on Saturday evening opened the meeting, followed by a welcome by W. A. Bloom, M.D., Fayette, and talks by Dr. R. L. Woodward, President of Central College, and Roscoe Pullen, M.D., Columbia, Dean of the School of Medicine of the University of Missouri. The evening was closed by "A Trip to the Moon" at the Morrison Observatory, conducted by Dr. Floyd Helton, director of the Observatory.

On Sunday a business meeting was held and the group was addressed by W. J. Shaw, M.D., Fayette; Mr. Wilbur Daniels, Fayette, spoke on "Legal Aspects in Medicine," and Robert A. Utterback, M.D., Iowa City, spoke on "What Is Neurology?" The session closed with a recital by N. Louise Wright, Fayette, composer-pianist.

LONG BEFORE HOT FLUSHES APPEAR . . .

Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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PAUL BALDWIN, M.D., HONORED

Paul Baldwin, M.D., Kennett, was honored with a dinner given by members of the staff of Dunklin County Memorial Hospital on his completion of fifty years of practice and service in Kennett. Following the dinner he was presented an air conditioner.

Medical Secretaries Visit Eli Lilly

Members of the Medical Secretaries and Assistants Society of Greater St. Louis visited Eli Lilly and Company June 6 to 8. In addition to the St. Louis members, the group was joined by six members of the Northeast Missouri Medical and Dental Assistants Society and six out-state members of the Missouri State Medical Secretaries and Assistants Society.

While guests of the company, they inspected the Lilly Research Laboratories and toured pharmaceutical, biological, and antibiotic production facilities.

Included in the group were two officers of the state organization: Mary K. Shell, president, Fayette, and Helen Middleton, corresponding secretary, Columbia.

Another group of members of the Medical Secretaries and Assistants Society of Greater St. Louis visited Lilly's last November 15 to 17.

Installation of officers of The Medical Secretaries and Assistants Society of Greater St. Louis was held on June 17, in the Crystal Room of the Sheraton Hotel, St. Louis.

Dr. R. O. Muether, President of The St. Louis Medical Society, installed the following as officers of the Society: President, Miss Clemence Broccard; Vice President, Miss Veronica Jannuzzo; Corresponding Secretary, Miss Beverly Salter; Recording Secretary, Miss Violet Litzsinger; Treasurer, Mrs. Bernadean Pisarkiewicz.

Following the installation ceremony, Dr. Arthur E. Strauss gave an interesting travel lecture, complete with movies, on a recent trip to South America.

MISSOURI PUBLIC HEALTH ASSOCIATION

A good number of Missouri physicians, in addition to full time public health doctors, appeared upon the program of the Missouri Public Health Association meeting, May 6 to 8, in St. Joseph. H. E. Petersen, M.D., St. Joseph, President, Missouri State Medical Association, addressed the opening session. Others on the three day program were: Drs. Carroll P. Hungate, Kansas City, Chairman, Committee on Civilian Defense of the Missouri State Medical Association; William J. Shaw, Fayette, member of the Committee on Civilian Defense; Roscoe L. Pullen, Columbia, Dean, School of Medicine of the University of Missouri; A. E. Upsher, Kansas City; Jacob Kulowski, St. Joseph; Loraine E. Schultz, Independence. Ralph E. Duncan, M.D., Kansas City, was elected president-elect at the closing session.

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ST. JOSEPH, MO.

Dr. Petersen addressed the session.

Drs. Amos, Pullen, Petersen and Shaw talked together between sessions.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

The 50th Anniversary of the Buchanan County Medical Society was climaxed by a banquet at the Moila Club, St. Joseph, on Wednesday night, June 2, 1954.

The banquet was highlighted by the presentation of certificates of appreciation to three charter members of the Society and a talk by Dr. **W. W. Bauer**, Director of the Bureau of Health Education, American Medical Association, Chicago, Illinois. Drs. **W. E. Pentz**, **T. M. Paul** and **F. H. Spencer**, St. Joseph, received scrolls from the Society in honor of their status as charter members. Dr. **H. E. Petersen**, President of the Missouri State Medical Association and a member of the Society, made the presentation of the scrolls. On behalf of the Society, Dr. **I. I. Rosenthal** presented Dr. Petersen a certificate of appreciation for his professional and civic service.

Three charter members were honored.

Dr. Petersen holds certificate presented him, with Dr. Bauer on left and Dr. Kulowski on right.

The banquet and its entire program was ably presided over by the Society's President, Dr. **Jacob Kulowski.** Dr. Bauer in giving the principal address of the evening spoke on "Medical History in the Making." Some 250 persons attended this gala affair including doctors, their wives and friends.

Allen I. Herman, M.D., *Secretary*

The banquet was well attended.

Clay County Medical Society

The Clay County Medical Society met in regular session with the Auxiliary at the Colonial Hotel in Liberty, on Tuesday, April 27. Dinner was served to both the members and their wives.

A short business session was held during which Dr. **Glenn Hendren** of Liberty, Chairman of the Clinical Conference Committee, gave a report on the progress of the Clinical Conference to be held on Thursday, November 4, 1954, at the Elms Hotel in Excelsior Springs. Since the Clay County Medical Society is the second oldest west of the Mississippi River, a gala affair is being planned.

Doctors **Walter L. Washburn**, Gashland, and **Walter Zick**, Smithville, arranged the scientific program for the evening. Their speaker was **Martin J. Mueller**, M.D., Kansas City, whose subject was "How to Evaluate a Patient with a Heart Murmur." This was an interesting program.

Thirty-nine members and their wives were present for the meeting.

S. R. McCracken, M.D., *Secretary*

Grand River Medical Society

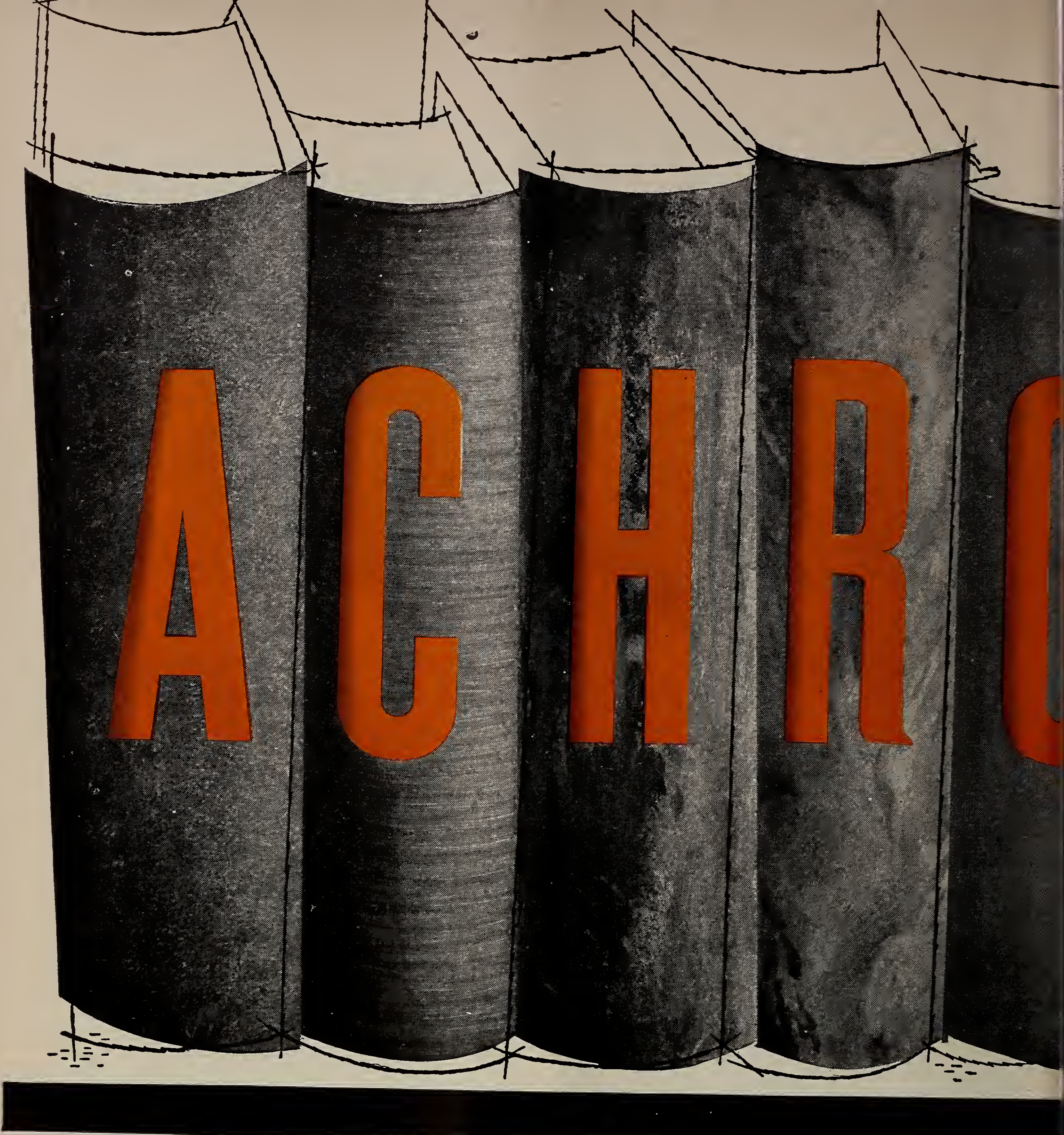
The Grand River Medical Society met May 13, 1954, Strand Hotel, Chillicothe. There were thirty members, twenty-two Auxiliary members, several pharmaceutical representatives and a few guests. A total of more than sixty attended the dinner.

The minutes of the last meeting were read and approved.

The scientific program was presented by Dr. **Ronald Buck**, St. Joseph, who discussed "Pitfalls in the Management of Common Fractures." An interesting discussion with questions followed.

It was regularly moved, seconded and carried by unanimous vote that the Society pay for the Auxiliary guest speaker's dinner.

Dr. **Donald Dowell** spoke of the recent death of Dr. **C. H. Wilbur**, Polo. Dr. Dowell, who had known Dr. Wilbur many years, spoke of his fine ability as a



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doctor and his excellent standing in the community. The Society stood with bowed heads for a short period in memory of the passing of Dr. Wilbur.

All were urged to attend the June 10 meeting which is the final meeting before summer vacation. It was announced that the annual golf tournament would be held the afternoon of June 10 preceding the evening meeting.

E. A. Duffy, M.D., *Secretary*

Meeting of June 10

The Grand River Medical Society met June 10, at the Strand Hotel, Chillicothe. There were twenty-six members, fifteen Auxiliary members and sixteen pharmaceutical representatives present for dinner.

The minutes of the last meeting were read and approved.

Dr. Knight was the guest speaker.

The Annual Golf Tournament was held in the afternoon at the Chillicothe Country Club. Dr. **Howard Carter** won the beautiful trophy. Other winners were Dr. **Watkins A. Broyles**, Dr. **H. S. Dowell**, Louis Johnson, Dr. **John S. Knight**, Ray McIntyre and Dr. **C. L. Clark.**

The scientific program was presented by Dr. **John S. Knight**, Kansas City, who presented an interesting paper on "The Management of Some Important Common Ear, Nose and Throat Conditions." Questions and discussion followed.

Ray McIntyre, Field Secretary, Missouri State Medical Association, made an interesting talk and answered some questions.

The next meeting of the Society will be September 9, 1954.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The regular May meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held May 13 at the Woodland Hospital, Moberly, beginning with a dinner at 6:30 p. m.

The scientific program for the evening was given by Dr. **Henry G. Schwartz**, Professor of neuro-surgery, Washington University Medical School, St. Louis, who spoke on "Ruptured Intervertebral Disc."

W. D. Chute, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A meeting of the Marion-Ralls-Shelby County Medical Society was held Thursday night, May 27, at the Mark Twain Hotel, Hannibal.

The evening festivities began with a social hour and dinner and then the scientific program for the evening was presented under the auspices of the Missouri Academy of General Practice and presented **Cyril MacBryde**, M.D., Associate Professor of Clinical Medicine, Washington University Medical School, St. Louis, who discussed "Electrolytes." An interesting question and answer period followed this excellent presentation. Twenty-one physicians were in attendance at this meeting.

Dinner preceded the scientific program.

Francis Burns, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society met at the office of Dr. **E. J. Senn**, President of the Society, in Herculaneum, on Friday night, June 4.

The program for the evening was a general discussion of the current state-wide medical indigency survey which is being made by the Institute of Research at the University of Missouri and under the auspices of the Missouri Health Council. Mr. Mark

The meeting was held in Dr. Senn's office.

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Hale and Mr. Donald Kountz of the Research Staff of the Institute and Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association, were present to discuss the various phases of the survey and particularly that referring to the doctor's reporting in the survey counties of which Jefferson County is one.

J. F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles Counties Medical Society

On Thursday night, May 20, a meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air, Wentzville.

Following a social hour and dinner those in attendance were privileged to hear Dr. **James L. Donahoe** of the Department of Pediatrics, St. Louis University Medical School, discuss "Respiratory Infections in Children."

Sixteen physicians attended this meeting.

Joseph C. Creech, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

Audrain County Medical Society

The Audrain County Medical Society held a dinner meeting at the Audrain County Hospital on Monday night, May 17.

The scientific program for the evening was given by Dr. **Roland P. Ladenson,** Columbia.

Kathryn C. Epple, M.D., *Secretary*

Meeting of June 28

The Audrain County Medical Society met at the Jefferson Hotel Tea Room, Mexico, Monday night, June 28, with twenty-two doctors in attendance.

Paul Hagemann, M.D., St. Louis, gave the principal address of the evening. He spoke on "Arthritis." An interesting discussion period followed his informative talk.

A number of visiting physicians were present from Callaway County including a number of externs from the University of Missouri Medical School who are associated with the State Mental Institution for the summer.

Kathryn C. Epple, *M.D., Secretary*

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

West Central Missouri Medical Society

A dinner meeting of the West Central Missouri Medical Society was held Thursday evening, May 13, at the Harrisonville Hotel, Harrisonville.

The evening festivities began with a social hour followed by dinner and then the scientific program which was under the auspices of the Missouri Academy of General Practice in cooperation with St. Louis University Medical School. The program consisted of a panel discussion on "Newer Drugs in the Management of Hypertension" by Doctors **James P. Murphy, James J. Inkley** and **Donald W. Bussman,** St. Louis.

In addition to the scientific presentation Mr. Tom Collins, Physician Relation's Representative of Kansas City Blue Cross-Blue Shield, discussed the recent territory change from the St. Louis plans to the Kansas City plans.

Thirty-eight physicians were in attendance.

O. B. Barger, M.D., *Secretary*

Meeting of June 10

The June dinner meeting of the West Central Missouri Medical Society was held at the Inn Hotel, Butler, Thursday night, June 10.

The scientific program was given by Dr. **Paul J. Busiek,** Springfield, who presented a most informative discussion on "Recent Developments in Polio." An interesting question and answer period followed Dr. Busiek's presentation.

The next meeting of the Society will be on September 9 in Nevada.

O. B. Barger, M.D., *Secretary*

Benton, Henry, Johnson, Pettis and Saline County Medical Societies

A joint meeting of the Benton, Henry, Johnson, Pettis and Saline County Medical Societies was held May 19 at the Bothwell Hospital, Sedalia.

Following an enjoyable social hour and dinner the forty doctors present were treated to an interesting panel discussion on "Newer Drugs in the Management of Hypertension" furnished by the Missouri Academy of General Practice in cooperation with the St. Louis University Medical School. Members of the panel were Drs. **James G. Janney, John Nuetzel** and **Robert Potashnick** of St. Louis. Dr. Janney served as moderator of the panel, presented a number of interesting cases of hypertension and was joined in the discussion of these cases by the other two members of the panel.

Ray Hollingsworth, M.D., *Henry County Society, Chairman for the Meeting.*

Meeting of June 9

On Wednesday night, June 9, a joint meeting of the Benton, Henry, Johnson, Pettis and Saline County Medical Societies was held at the Old Missouri Homestead, Sedalia.

The evening program began with a social hour at 6:00 p. m. and dinner at 7:00 p. m. The scientific presentation of the evening was furnished through the courtesy of the National Drug Company and the Missouri Academy of General Practice. **Gustav J. Martin,** M.D., Research Director, National Drug Company, Philadelphia, and **Irving Innerfield,** M.D., Research Director, Mt. Sinai Hospital, New York City, discussed "Clinical Enzymology"—a new approach in treating inflammatory conditions such as chronic phlebitis,

A social hour was enjoyed by members and guests.

There was informal discussion preceding the presentation.

ocular inflammation and varicose and diabetic ulcers which in the past has constituted a perplexing problem in medical practice. This was a most interesting discussion and much interest was evidenced by the forty-five doctors in attendance.

Carl D. Siegel, M.D., *Secretary,*
Pettis County Medical Society

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner at 7 o'clock, Wednesday night, May 26 at Frederick's Cafe west of Cabool with the following members and visitors present: Drs. **R. W. Denney** and **A. C. Ames**, Mountain Grove; **Garrett S. Hogg, Jr.**, Cabool; **T. J. Burns** and **J. B. Kelley**, Houston; **M. B. Perkins** and **Paul A. Davis**, Willow Springs; **Jack N. Wiles**, Willow Springs; **H. W. Miller**, Chicago; and **W. W. Tillman** and **William F. Johnson**, Springfield, and the wives of several of them.

After dinner the ladies went home with Mrs. Hogg for the evening and the doctors went to the office of Dr. Hogg for the program, where the meeting was called to order by the President, Dr. Perkins, and turned over to the speakers from Springfield.

Dr. Tillman spoke on "Anesthesia" and Dr. Johnson spoke on "Sterility," more especially in the male and efforts to overcome it.

Dr. Perkins expressed the thanks of the Society and the meeting adjourned without any further business. The next meeting will be in Willow Springs, June 23.

A. C. Ames, M.D., *Secretary*

Meeting of June 23

The South Central Counties Medical Society met for dinner at the Aztec Club near Willow Springs, Wednesday night, June 23, with the following members and visitors present: Drs. **R. W. Denney**, **S. W. Connor** and **A. C. Ames**, Mountain Grove; **M. B. Perkins**, **Paul A. Davis** and **H. W. Miller**, Willow Springs; **Rollin H. Smith**, West Plains; **C. W. Cooper**, Thayer, **J. D. Wheeler**, Chicago, and **Robert Maher** and **Max Rosen**, Springfield, and the wives of most of them.

After dinner the ladies went home with Mrs. Perkins for the evening and the doctors went to the office of Dr. Perkins, the President, where he called the meeting to order and the minutes of the last meeting were read and approved.

The illness of Dr. **Randall** and Dr. **Frame** was reported and it was voted to send each of them a card. Dr. Cooper then gave an invitiation to make the next meeting a picnic at his cabin on Spring River below Mammoth Spring, Arkansas, which was accepted for Thursday, July 15, for afternoon and evening.

Dr. Maher then read a paper on "Cancer of the Mouth, Throat and Neck" and stressed the importance of removing the affected glands of the neck.

Dr. Rosen spoke on "Deafness" and measures and operations for its relief.

Dr. Perkins expressed the thanks of the society and the meeting adjourned.

A. C. Ames, M.D., *Secretary*

Laclede County Medical Society

The medical staff of the Louise G. Wallace Hospital, Lebanon, comprising the members of the Laclede County Medical Society, held a dinner meeting at the hospital on Monday night, June 14, to discuss the current state-wide medical indigency survey.

This indigency study is being sponsored by the Missouri Health Council in cooperation with the Institute of Research at the University of Missouri. Laclede County has been selected as one of the counties in which the doctors are being asked to maintain certain records. Mr. Mark Hale and Mr. Donald Kountz of the Institute Staff and Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association, attended the meeting and explained the procedures involved in the study.

G. E. Fisher, M.D., *Secretary*

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

The Phelps-Crawford-Dent-Pulaski-Maries County Medical Society held its regular monthly dinner meeting at Rolla on Thursday night, May 27.

The scientific program for the evening was furnished by the Missouri Academy of General Practice. **James G. Janney**, M.D., St. Louis, and **Gene B. Starkloff**, M.D., St. Louis, discussed "Fluid and Electrolyte Balance in Medical and Surgical Treatment of Patients."

Twenty-seven physicians and guests were present to hear this interesting presentation.

M. K. Underwood, M.D., *Secretary*

Meeting of June 24

A dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society was held at Rolla on Thursday night, June 24, in the Pine Room of the Greyhound Bus Station.

The scientific program for the evening, under the auspices of the Missouri Academy of General Practice, was presented by Dr. **Paul J. Busiek**, Springfield, who spoke on "Recent Developments in Polio." An interesting general discussion followed his talk.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Cape Girardeau County Medical Society

A meeting of the Cape Girardeau County Medical Society was held at the St. Francis Hospital, Cape Girardeau, on Tuesday night, June 8.

The primary consideration for the evening was a discussion of the current state-wide medical indigency survey which is being carried on at the present time by the Institute of Research at the University of Missouri under the auspices of the Missouri Health Council. Cape Girardeau County has been selected as one of the counties in which doctors are being asked to furnish certain information on the problem of medical indigency. Mr. Mark Hale and Mr. Donald Kountz of the Institute Staff and Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association, were present to discuss the details of the survey.

June 8 meeting of the Cape Girardeau County Medical Society.

Hugh V. Ashley, Jr., *Secretary*

COUNCIL MINUTES

The Council met at the Sheraton Hotel, St. Louis, June 5, 6, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Those present were Drs. Sewell, Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; C. G. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; Royse Bohrer, Jefferson City; Joseph C. Peden, St. Louis; A. P. Rowlette, Moberly; Daniel B. Landau, Hannibal; Messrs. John W. Noble, Kennett; John Buckner, Springfield; Lemoine Skinner, James Koenig, Ray McIntyre, T. R. O'Brien, St. Louis.

The Council met on June 5 and 6.

Annual Session

Mr. O'Brien gave the dates of the 1955 Annual Session as March 27-30 and presented a suggested outline for the session:

Sunday, March 27, 1955

1:30 p.m. House of Delegates.
4:00 p.m. or later. Reference Committees.
6:00 p.m. Adjourn.
7:30 p.m. Reference Committees, if needed.

Monday, March 28, 1955

9:00 a.m. Scientific Session.
12:00 noon. Round Table Luncheon.
2:00 p.m. Scientific Session to 3:30 p.m.
4:00 p.m. House of Delegates.
6:00 p.m. Reference Committees, specialty groups or others.

Tuesday, March 29, 1955

9:00 a.m. Scientific Session.
12:00 noon. Round Table Luncheon.
2:00 p.m. Scientific Session to 5:00 p.m.
7:30 p.m. Annual Banquet.

Wednesday, March 30, 1955

9:00 a.m. Scientific Session to 12:00 noon.
1:30 p.m. House of Delegates.

Drs. Buhler and Kiene were asked to decide on hotel headquarters and it was suggested that the first session of the House be held in the hotel, together with reference committees.

Uniform Insurance Form

It was reported that a committee of the A.M.A. was working with the Health Insurance Council of America to work out insurance reporting forms on a national basis so there would be uniformity.

National Society for Medical Research

A request for contribution to the National Society for Medical Research was presented and on motion of Dr. Vohs, it was voted that $50.00 be contributed again this year.

Social Security

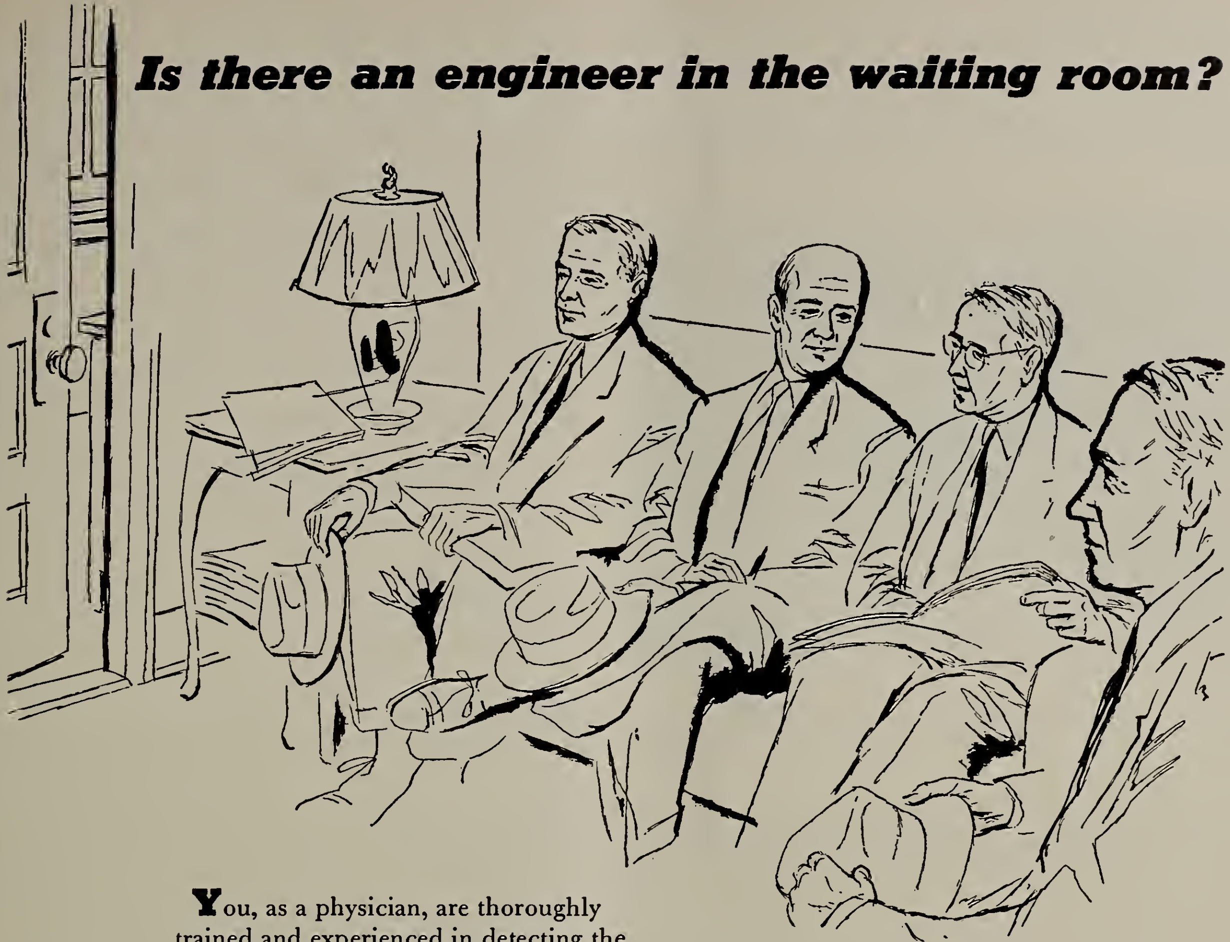
The status of the legislation on Federal Social Security was reviewed. As voted out of the House Committee on Ways and Means, physicians will not be included under Social Security.

Treasurer's Report

Dr. Vohs reported on the financial status of the Association and said that expenditures were within the budget. On motion the report was accepted.

Field Secretary's Report

Mr. McIntyre presented a mimeographed report of county society meetings with programs under the auspices of the Missouri Academy of General Prac-



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tice held during the year, together with the attendance at the meetings. He also mentioned regular meetings of other societies where scientific programs were not furnished by the Academy.

He reported that Newton County was in the process of hyphenating with the Ozarks Medical Society and, on motion, it was voted that Dr. Sewell and Mr. McIntyre arrange this prior to September 1. The 50th Anniversary celebration of Buchanan County Medical Society was reported and it was announced that Clay County would celebrate its 100th Anniversary this fall. He reported on the meeting of the St. Joseph Clinical Conference on April 22, the Missouri Health Council on April 30, the Missouri Public Health Association meeting May 6-8. He reported that eight physicians had gone into new locations in smaller towns just recently. The Indigent Care Survey is now being started in thirteen counties and Mr. McIntyre said that physicians in those counties will be asked to attend meetings and be contacted by mail for full particulars on what they will be asked to do to assist.

Committee on Medical Economics and Committee on Maternal Welfare met concurrently, having lunch together.

Secretary's Letter

Mr. O'Brien said that the response to the Secretary's Letter which went to all members following the adoption by the House of Delegates of the licensure proposal had been commendatory with one exception; also that he had had many telephone calls of approval. It was said that the Committee on Public Policy and Public Relations would have a meeting within the near future and that probably more definite information would be forthcoming at that time.

Conferences

After discussion, on motion of Dr. Buhler, it was voted that any discussion concerning the licensure proposal, either with county society groups or outside groups, should be cleared through the state office. It was suggested that this be placed in the Councilor's reports to county societies.

Medical Economics

Dr. Rowlette reported that the Committee on Medical Economics studied a questionnaire from the Missouri State Chamber of Commerce, which was referred to the Committee by the Council, as follows:

1. Subject small employers including physicians (with less than eight employees) to the federal unemployment compensation tax of 3 per cent of the employer's payroll, up to $3,000.00, for each employee. Under Missouri Law, such an amendment to the federal law would automatically subject these small employers to a 2.7 per cent state tax which would offset 90 per cent of the federal tax, so that these employers would pay 2.7 per cent on payrolls up to $3,000.00, for each employee to the Missouri Division of Employment Security, and .3 per cent to the federal government.

2. Permit states to grant a reduced tax rate based on experience after one year instead of the present three years.

The Committee decided to go on record as opposed to the extension of unemployment compensation to include groups of less than eight, and favor changing the experience rating period from three to one year.

On motion of Dr. Muether, this portion of the report was accepted.

Dr. Rowlette reported further: The A.M.A. wrote constituent associations with a questionnaire on Medical Ethics, as follows:

1. Section 6 of Chapter I (pages 9 and 10) and Section 5 of Chapter VII (page 24) of the December 1953 Principles establish the Principles of Medical Ethics with respect to "receipt of remuneration for professional services" and "Commissions." The interpretation of these Principles by the Judicial Council is that it is unethical for two physicians who participate in the care of a patient to render a single bill.

2. Do the Principles of Medical Ethics of your state association differ in any significant respect in their application from Section 6 of Chapter I and Section 5 of Chapter VII of the Principles of Medical Ethics of the American Medical Association?

3. What is the policy in your state concerning billing procedures when two or more physicians participate in the care of a patient?

4. How are payments made to physicians by health insurance agencies when two or more physicians serve a patient?

The Committee agreed that the answer to No. 2 was "No"; to No. 3 "Joint billing is considered unethical"; to No. 4 "payment is made to surgeon, no allowance is made to assistants." It was suggested that, while the constitution of the Missouri State Medical Association stated that the A.M.A. Principles of Medical Ethics was that of the Association, it might be well to actually incorporate them.

On motion of Dr. Muether, this portion of the report was adopted.

Dr. Rowlette reported on the study by the Committee of hospital admissions for indigent patients at the University of Missouri, it being pointed out that of Minnesota, Iowa, Wisconsin and Michigan, in three all expenses are paid by the counties and in the fourth by the state and the county. It was pointed out that the ideal was for the county to pay all but that this may not be practical in Missouri. It was pointed out that the survey of indigent care being made by the Missouri Health Council might give some pertinent data. It was decided that the Committee should offer its services to the Board of Curators in any way possible when they have plans definite enough for discussion.

Dr. Rowlette reported that the matter of health in-

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stitutes, sponsored principally by labor unions in larger cities was felt to be a county medical society problem rather than a state problem and that the Committee had taken no action. Following discussion by Drs. Washburn, Petersen, Muether, and Mr. O'Brien, this portion of the report, on motion by Dr. Buhler, was referred back to the Committee with the request that it include all corporate practice and that the Association's attorney assist the Committee.

Dr. Rowlette reported that the question of fee schedules for recipients of welfare benefits and the work of the Manion Commission would be studied further by the Committee after data has been acquired.

Doctors' Draft Act

Dr. Allen reported briefly and said that probably about 400 physicians would be called by the Navy for June and July; that he assumes that all priority 1 and 2 men will be needed during the remainder of the year. He said that his personal advice had been that any physician who may be liable to draft, should go into service.

Committee on Fractures

Dr. Kiene presented a report of the Committee on Fractures and called attention to a resolution adopted by the Committee as follows:

> Whereas, Motor car deaths in the United States of America number between 35,000 and 40,000 annually and motor car injuries number about four million annually, and
>
> Whereas, There seems little likelihood of any great reduction of motor accidents in the near future; and
>
> Whereas, Studies by physicians and physicists have clearly shown that motor injuries and motor deaths can be strikingly reduced by the use of safety belts and safety shoulder straps, therefore, be it
>
> *Resolved,* That the Missouri State Medical Association will give all possible aid to those measures which will reduce the frightful mortality and injury rate resulting from the use of motor cars, and be it further
>
> *Resolved,* That the Society hereby recommends to the motor car manufacturers of America that they equip all automobiles with safety belts to meet the specifications of the C.A.A. Technical Standard Order, T.S.O.-C22 A, November 15, 1950; and further recommends that these manufacturers provide seats, cushions, and doors which will withstand impacts of 10 to 15 G's without injuries.
>
> *Resolved,* That they stress the safety features in their automobiles and to stress safety measures in their advertisements to the public.

Dr. Kiene said that the committee had studied recommendations of Wyoming and New York for accident insurance for pupil participants in athletics and physical education programs but that the Committee wished to study this further.

On motion of Dr. Muether, the report was accepted.

Mental Hygiene Director

A request from the Jackson County Medical Society's Committee on Psychiatry and Neurology that the Missouri Statutes be amended so that a physician, trained in psychiatry, be Director of the Division, was read. The situation of the last few years was reviewed and it was discussed by Drs. Francka and Kiene and Mr. Noble and Mr. O'Brien. On motion of Dr. Kiene, it was voted that this be referred back to the Committee on Mental Health for further study and recommendation.

Committee Appointments

Dr. Petersen presented the following committee appointments, which were approved by the Council:

Special Committee on Hospital Inspection Act: Drs. H. E. Petersen, St. Joseph; V. B. Buhler, Kansas City; W. S. Sewell, Springfield; Curtis H. Lohr, St. Louis; W. A. Bloom, Fayette; A. P. Rowlette, Moberly; M. K. Underwood, Rolla.

Committee on Physical Medicine: Drs. D. Elliott O'Reilly, St. Louis, Chairman; Horace E. Thomas, Columbia.

Committee on Cancer: Associate Members, Drs. C. W. Meinershagen, Jefferson City; A. N. Arneson, St. Louis.

Home Town Care of Veterans

A request from the Veterans Administration for renewal of the contract for "Home Town Care of Veterans" for the period July 1, 1954, through June 30, 1955, was presented. On motion of Dr. Vohs, it was voted to renew the contract.

Committee on Accreditation

The work of the Joint Committee on Accreditation was discussed but no action was taken. It was felt that Delegates to the A.M.A. may bring some information to the next Council meeting.

Editor

On motion of Dr. Vohs, Vincent T. Williams, M.D., Kansas City, was appointed Editor for 1955.

Publication Committee

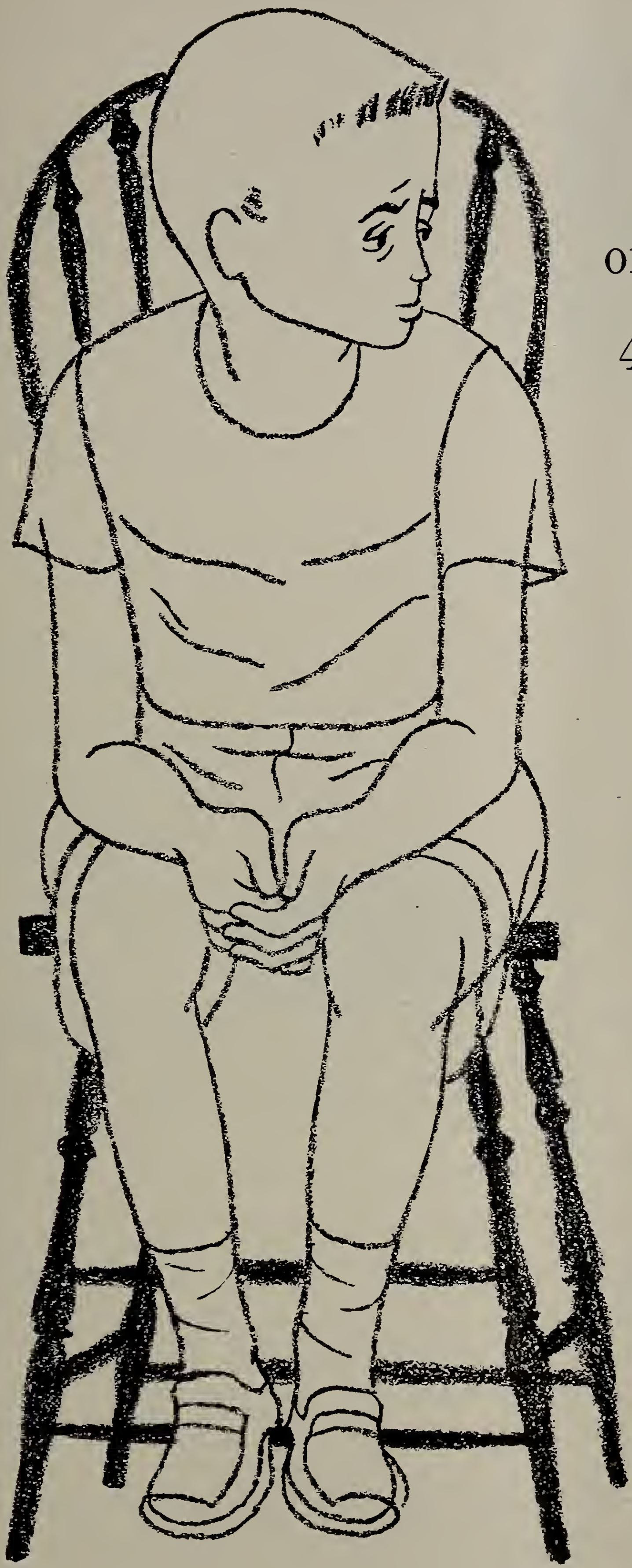
On motion of Dr. Buhler, the Committee on Publication was reappointed.

Committee on Infant and Child Care

Dr. Landau reported briefly on a report of the Committee on Infant and Child Care, copies of the report being given the Councilors. He asked approval of the recommendation of the Committee to hold a conference with the State Division of Health, the State Teachers' Association, the Dental Association, the P.T.A. and the State Department of Education for the discussion of the following objectives:

Dr. Landau reported to the Council for the Committee on Infant and Child Care.

1. Education toward creating a desire for a health program in schools.
2. Preschool and periodic examination of Students.



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Schaerrer, W. C., J. Missouri M. A., 37:287.

408152A

3. Examinations of teachers and all school personnel in contact with pupils.
4. Accident prevention and safety recommendations.

Committee on Maternal Welfare and Committee on Medical Economics having lunch together.

On motion of Dr. Summers, approval of this recommendation was voted.

Dr. Landau presented the proposal of the Committee that personnel in small hospitals be trained in the treatment and diagnosis of erythroblastosis. After discussion, in which it was brought out that the procedure was needed so infrequently and was so technical that the practicality of training for treatment was questionable, it was the feeling of the Council that the educational advantage of the program had merit and that the Committee should proceed with it.

Civil Defense Representative

A request from Dr. Carroll Hungate to Dr. Kiene that the Council approve expenses of a representative to a meeting on Civil Defense in San Francisco at the time of the A.M.A. was presented. Following discussion of the expense of attendance at a meeting at such distance and the ruling of the House of Delegates that Delegates and Alternates have expenses paid, to a limited extent, on motion of Dr. Muether, it was voted not to send a representative to the meeting on Civil Defense. It was requested that a review of the amount paid toward the expenses of Delegates be presented at the next meeting of the Council, looking toward a recommendation to the House of Delegates of a more realistic budget for this purpose.

Dr. Scherman

It was voted to send flowers to Dr. Victor B. Scherman who is ill.

Next Meeting

Dr. Sewell invited the Council to meet in Springfield in the early fall, the exact date to be set later.

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Civil Defense and Disaster

A Progress Report

Carroll P. Hungate, M.D., *Chairman, Committee on Emergency Medical Service*

On Sunday, May 16, a state-wide Civil Defense meeting of Medical Health personnel was held in Jefferson City. A representative of the following societies or associations was present from each of the eight outstate Councillor districts:

a. Medical Association, Chairman
b. Nurses Association
c. Dental Association
d. Osteopathic Association
e. Veterinarians Association
f. Pharmaceutical Association
g. Hospital Association
h. Funeral Directors Association
i. Public Health Officers
j. Optometrists Association

The following physicians are Chairmen of the Medical-Health Committees in the various districts as well as together constituting the Emergency Medical Services Committee of the Missouri State Medical Association:

District 1. John Forgrave, M.D., St. Joseph, and A. S. Bristow, M.D., Princeton.
District 2. Bernard Murphey, M.D., Hannibal.
District 3. Curtis H. Lohr, M.D., Clayton.
District 4. James F. Dowd, M.D., St. Louis County (a co-chairman to be appointed).
District 5. William Shaw, M.D., Fayette.
District 6. P. V. Siegel, M.D., Smithton.
District 7. C. P. Hungate, M.D., Kansas City.
District 8. Don Silsby, Jr., M.D., Springfield, and Robert Ferguson, M.D., Webb City.
District 9. Raymond Froleich, M.D., Lebanon.
District 10. Raymond A. Ritter, M.D., Cape Girardeau.

The District Committees are appointing similar committees in each county of the state and in each school district. The objective of these committees is to interest the school Parent-Teacher Associations in taking an active part in the Medical-Health Civil Defense and Disaster program, using the school as the focal point of recruitment and training.

The school principal will be the coordinator of the program. Where schools are designated as emergency hospitals, he will act as the administrator as he knows best the heating, plumbing and food service facilities of the establishment. The school principal, Parent-Teacher Association members and the Medical-Health Civil Defense Committees will develop a program on Civil Defense for each meeting of the Parent-Teacher Association. Ten minutes will be given at the beginning of the Parent-Teacher Association meeting to some aspect of Civil Defense and Disaster. An hour at the end of the meeting will be devoted to training first-aid personnel, stretcher bearers and home nurses. Mobile medical battalions will be organized in the schools.

These groups will also contact the state legislators, seeking support for the Disaster program presented by Mr. A. S. McDaniel, Director, Civil Defense for the State of Missouri to the State Legislature at its biannual sessions.

Films, speakers and necessary training material can be obtained through the State Civil Defense Office or through the office of Dr. James R. Amos, Director of Health for the State of Missouri.

The Radiological Defense training program is a separate project under Professor Newell S. Gingrich at the University of Missouri. The Professor of Physics or Chemistry at the various colleges in Missouri are assisting him in order to decentralize the recruitment and training of monitors.

The Blood Program is likewise a separate project under the direction of Doctors Hollis Allen of St. Louis and Russell Kerr of Kansas City. Bleeding centers will be designated at blood banks or laboratories in each district where recruitment and training of auxiliary laboratory technicians will be carried out.

The Public Health aspects of Civil Defense and Disaster are under the direction of Dr. James R. Amos, Director of Health. Included in this program is the environmental sanitation problem of radiation fall-out during continental and Pacific nuclear weapons tests. It is hoped that the State of Missouri will have two mobile radiological laboratories which will make periodic surveys of soil, water and plant life throughout Missouri following nuclear weapons tests. In this way, following a military attack, we will have an accurate record of the degree of radiation contamination before and after the explosion of nuclear weapons.

The cooperation of every physician in Missouri is needed to continue this program which finally has been crystallized into an active organization. Two weeks following the meeting in Jefferson City, Dr. William Shaw of Fayette, Dr. Raymond Ritter of Cape Girardeau, and Dr. Don Silsby, Jr., of Springfield had already completed their county organizations. General District procedural meetings were scheduled in Springfield (District 8) on June 6 and in Cape Girardeau (District 10) on June 27.

Much credit for the basic planning in Missouri is due Dr. Curtis Lohr of Clayton; to Dr. James R. Amos for the excellent administration of the present program, and for our continued success, to Mr. David Horn, newly appointed Medical-Health coordinator in the State Civil Defense Director's office.

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Letter to Missouri Medicine

Widows

To the Editor:

Please do not reject this letter because it commences and ends with some facetious comments. As I am a widower it is only physiologic that widows interest me. Besides I had a more or less amicable relationship with women (that is mothers) for fifty years.

Near me in the country lives a delightful family—Mr. and Mrs. D. Blunt—successful farmers. The wife is a vigorous social and religious worker in this community. Not long ago when I took dinner with the family, I remarked about the many widows in the church.

"We have about 40 widows in our church."

"There are 70 widows in my church," my hostess declared exultingly.

As she is widely acquainted not only in her church but also in the Steelville suburbs, I asked her to prepare a list of widows (some spinsters got in the group) of this neighborhood. I was surprised! She had 140 names in a population of 2,400 approximately, or 6 per cent. Was not this rather high?

I looked up the statistics. The average life of women is greater than that of men—about four years longer.

Mrs. Blunt's figures revealed that there are about six females and three males widowed to every 100 inhabitants in Crawford County. But this is based on the whole population and not the part over 14 years in the census.

The relation of the urban and farm widows shows a greater stability of marriage in the farm population. Thus the widows are 17 per cent of the total female population and only 8 per cent of the farm women. Is this the exact truth? Is not the mortality of farm women higher than city women?

Probably the farmer having lost his wife marries again and this makes up the wide discrepancy between widowed males and females.

The assumption that the death rate of women during the child-bearing period is (20 to 29 years) fallacious. Statistics do not corroborate the opinion that pregnancy is a cause of death. As is well known, the boys begin life with a surplus but their death rate is always higher than that of girls.

A few lines concerning Missouri might be added. Most statistics record the divorced wife as a widow, hence the figures do not really show the comparative death rate of men and women. So many divorces in 1950! The marriages total 34,300, and the total divorces 12,912, or one in four. Stated differently this is 0.3 per cent of the total population, but does not include the natural widows. The U. S. census for 1950, reveals that 8,000,000 females (widowed and divorced) were recorded; that is 5 per cent of the total population. Assuming that the marriage rate in all the states is the same, the divorces are much greater than deaths among women.

Do not infer that I harbor a prejudice against specialization. Progress in medicine and surgery can only be accomplished when the physician limits the field of his study. Continue to train specialists—these are easily adopted by our growing metropolitan population. In fact, I will support the adoption of another specialist, namely, the gyniatrician, who will be an expert on the medical care of widows. The promotion of pediatrics has been a great success, why not welcome the gyniatrician. The climacteric syndrome is often puzzling, and the daily injections of a hormone may be profitable. The widows live about five years longer than the men; why not increase this figure to eight years?

John Zahorsky, M.D.
Steelville, Mo.

A Defense of the Vaginal Douche

To the Editor:

In the recent literature there has been a plethora of articles by editorializing gynecologists viewing with exaggerated alarm the even occasional use of the vaginal douche. Granting that nihilistic views are frequently voiced in many phases of medicine, and that these often result in our modifying or re-evaluating our concepts, it seems that some of us should raise at least a whisper in defense of the douche before its character has been utterly assassinated. We are speaking here of the simple cleansing douche, all the while looking at any alleged therapeutic efficacy with disdain rather than alarm.

The fault of almost all these articles recently seen is simply one of overzealousness. We read, for example, that the vagina is "self-cleansing." This is put forth as a statement of fact, somehow visualizing a utopian symbiosis where detritus is lysed, Doderlein gayly reciprocates with lactobacillus, and rods and cocci sleep communally in rugal havens of bliss. And while it is pointed out that douching can blight this happy state of affairs, we usually read a few paragraphs later that no short therapeutic washing can essentially change the existing flora. This has all the paradox of a psychiatrist's self-diagnosis.

In their persecutory zeal these authors, being modern if nothing else, resort to name-calling. "Ritualistic," "Aatvistic," "Anachronistic," are typical of the hurled epithets. It is difficult to associate the procedure under discussion with any form of imagined ritual, although the incongruity does somehow arouse fascinating trains of speculation. And to have stood the test of time in many completely unrelated races and civilizations should be cause for reassessment of value rather than disparagement. Despite intermittent accumulation of cellular debris from both north and south, the vagina is unable to sneeze, (reports to the contrary being unsubstantiated), and an at least superficial ablution when the occasion warrants seems only routine first echelon maintenance.

Finally, here is a thought for those who condemn and decry. A Russian officer who had spent some months in the States once told us how happy he had been to get back to Russia. "In Russia," he explained, "women smell like women, not like talcum powder." Surely only a communist or an anosmic gynecologist could condemn unequivocally the judicious vaginal douche.

Robert Lamar, M.D.
Kansas City

WENDELL G. SCOTT, M.D., AWARDED HONORARY DEGREE

The University of Colorado conferred the degree of Doctor of Science on Wendell G. Scott, M.D., St. Louis, at ceremonies in Boulder, Colorado, on June 5. The citation read:

It is my very great pleasure to present my teacher and friend, Dr. Wendell G. Scott, for the honorary degree, Doctor of Science. Dr. Scott was born in Boulder, Colorado, and was graduated from this University, with the Bachelor of Arts Degree, in 1928. His degree, Doctor of Medicine, was awarded by Washington University, in St. Louis, in 1932. Particular skills and competency as an intern in the Barnes Hospital, and as a resident in the Mallinckrodt Institute of Radiology led to his appointment as an instructor in Radiology in Washington University in 1934. He has been a faculty member of the Washington University School of Medicine ever since, and has been since 1936, Associate Professor of Clinical Radiology.

Dr. Scott's character and work have won for him national and international honors and responsibilities. He was on active duty with the Navy during World War II and was honorably released with the rank of Captain in the Medical Corps. He is now a Reserve Consultant in Radiology to the Navy Bureau of Medicine and Surgery, and is on the Executive Council of the U. S. Association of Military Surgeons.

He is a member of 22 scientific and professional societies. In ten of these he has been elected to high official and honorary positions. He has been vice-president of the Radiological Society of North America; on the Board of Chancellors of the American College of Radiology; treasurer, American Roentgen Ray Society; associate editor of the *American Journal of Roentgenology, Radium Therapy and Nuclear Medicine*. Dr. Scott is a member of the Committee on Radiology, of the National Research Council.

His scientific publications and exhibits have been cited by formal awards eleven times. He is the editor of three books, and the author or co-author of 75 other publications.

Dr. Scott has always been prominent in the development of new x-ray techniques, such as kymography and body-section radiology, and he has been foremost in the ranks in perfecting the apparatus for obtaining automatic serial films made in rapid succession to demonstrate the circulation through organs such as the brain and the heart.

Dr. Scott is recognized by his students and colleagues as a brilliant fellow-student, teacher and investigator. No less, he is a great physician, beloved by his patients.

Mr. President, on the recommendation of the Senate of the University, I have the honor to present Wendell Garrison Scott for the degree Doctor of Science, honoris causa.

Special Article

(Continued from page 668)

then the conception is doomed before it leaves the planner's blueprint. If the failure be local it is bad, but if it be National then it is tragedy sheer and stark.

Where local failure can cause tremors, National failure, or partial failure, can cause a colossal earthquake which can shake mankind's, always uneasy, confidence in those that plan his way of life.

The second, and this directly concerns the Health Scheme in Britain, is that while the scheme is probably working excellently in those areas which are not overcrowded (and these are not too plentiful in present day Britain) I cannot think that all is well in the thickly populated industrial areas. I hear of long waiting queues outside the doctor's consulting room, of hurried treatment and overworked doctors: all of this, if true, is bad.

On the credit side of the column is the relief from anxiety of sudden and crippling doctor's bills which no person need fear in Britain today. Yet cannot we ask with perfect truth: Healthy? Wealthy? or Wise?

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Crossroads Comment

(Continued from page 632)

soul I consult frequently with Bishop Sheen or Norman Vincent Peale or Harry Emerson Fosdick. Besides that it's the best treatment for my old belly ache and, I hope, prophylaxis against an impending coronary.

Being used as a convenience and/or taken for granted really hurts nothing but my ego or vanity. I keep telling myself that next time it happens just what I am going to do and have a little speech all planned out. About that time that little man gigs me in the rear and I go ahead like the good old country doc is supposed to do. My late partner, Dr. Holtzen, used to say that was another star in his crown. You know I have found out the hardest person for me to live with congenially is myself and I think he has something there.

In case you wonder why I practice medicine if it's such a job I really couldn't say except that it is a disease for which there is no cure except practicing medicine. Then too, if I devote all my time to whitteling I would have to practice medicine as a hobby and I don't think that would work.

Things are looking good at the Crossroads.

Pete

What Is Your Hobby, Doctor?

(Continued from page 673)

The present exhibit includes: 1. the problem (statistical and otherwise), 2. the physical factors involved (why we get hurt in crashes), 3. how we get hurt and what modifies man's relationship to the interior of the car (internal environment), 4. injuries themselves (from study of 528 local cases) and 5. their prevention through better automotive engineering and design.

Boiled down, the problem is one of the external and internal automotive environment. The external environment consists essentially of the physical factors involved during crash conditions; as a result of accumulative and ungoverned releases of kinetic energy. A crash is then a manifestation of energy absorption by structural deformation. Thus the external environment may be best modified by keeping weight and speed of the car down to within rational needs of transportation. By the same token injury is energy absorption manifested by anatomic deformation as a result of contacts between human body and interior automotive structure (provided said body has not been ejected to the outside environment). The interior environment is modified by position of the individual, the natural tolerance of the human body to external forces and by carriers (belts) between the individual and the interior structure.

This all seems oversimplified but I do not mean it that way. The entire problem is complex, but I have organized it to some degree better than it had been before. That is my contribution to date.

It should be obvious that medical groups can do much to solve this problem; even if only to pressure manufacturers into recognizing the importance of safer automotive engineering and design; information on which is and has been available for some time. Integration between engineers, medicine and manufacturers is a must. The most recalcitrant of the three is the manufacturers. We can force the issue best from the state medical levels and a start in this direction has been made in some quarters.

Finally, with the realization that the most good for the greatest number can be accomplished best through organizations, one of my first official acts as president of the Buchanan County Medical Society, was to appoint a Safety committee, of which Dr. J. R. McDaniel is chairman. Other members of this committee include Drs. W. H. Ames, F. J. Berney, Ronald Buck, R. W. Conrad, J. F. Chiaratino, G. W. Forman, F. X. Hartigan, T. L. Howden, J. M. Hughes, W. P. McDonald, J. H. Ryan, T. B. Schertz, Sharon E. Waggoner and O. Earl Whitsell. Dr. McDaniel has been appointed to the board of Governors of the St. Joseph Safety Council. The committee as a whole will function as an independent unit of the medical society and as a cooperative body with the St. Joseph Safety Council in the promotion of traffic, home, farm and industrial safety.

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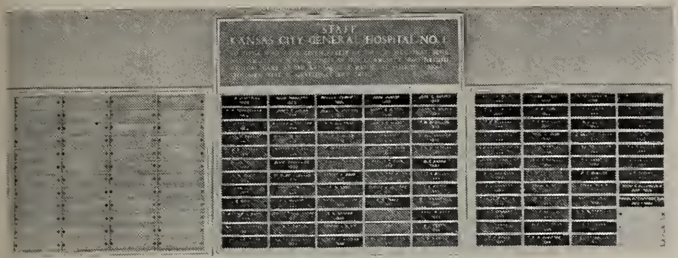

A memorial service for 109 deceased members of the staff of Kansas City Hospital No. 1 was held on May 30 and a bronze plaque was placed, containing the names of all deceased members. Bishop Robert Nelson Spencer presented the memorial address; background of the memorial was given by Edwin Henry Schorer, M.D., chairman on memorial and awards, and remarks were made by members of the committee on memorial and awards, E. Kip Robinson, M.D., Kames A. Jarvis, M.D., and Irwin S. Brown, M.D.

. . . Are We Against Fee-Splitting,

rebating, ghost surgery? Well, then, let's get out and do something about it. Let's stop getting our feelings hurt every time someone says general practitioners engage in it. Let's stop shouting that it takes two to split fees, and stop trying to put the blame on the surgeon. Of course the surgeons are to blame where this evil goes on, maybe they are to blame more than the general practitioners, but that doesn't excuse us. . . . What can we do to help eliminate these evils? First, we can and must come out strongly and repeatedly as unequivocally and unalterably opposed to fee-splitting, rebating, and ghost surgery in any shape or form. Second, we can act jointly with the leadership of the A.M.A. and develop a program of action that we can take in cooperation with them. Third, if each member of the Academy will develop a program of his own bringing all fees and services of all physicians into the open, the ways of the transgressors will be made hard indeed. . . . —Stanley R. Truman, M.D., *G.P.*

. . . Then Here's the Answer

. . . When the family physician meets his responsibilities, we can toss the code of ethics out of the window. This is not to place upon him all of the blame for unethical practices, but merely to say that he holds the key to the solution of this serious problem. He knows the specialists to whom he would go for personal care, and to whom he would take those nearest and dearest to him. He would tolerate no other consideration in such cases than the best interests of the patient. When he applies the same criteria to the selection of specialists for his patients, he has met fully his responsibility as a physician. . . .—Paul R. Hawley, M.D., *Bulletin of the American College of Surgeons.*

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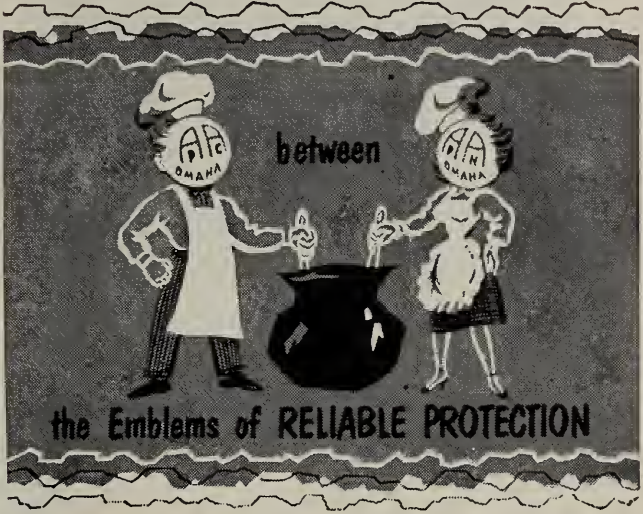
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Curiosa et Trivia

WILLIAM B. McCUNNIFF, M.D.

Dr. Elisha C. Dick, physician to George Washington, pronounced him dead December 14, 1799. He immediately cut the weight cord on the mantel clock to record the moment for history. The clock, which has never run since, indicates the time, 10:20 p.m.

Since the first fatality in 1899, more persons have died on this country's highways than on the battlefields of all United States wars including the Revolution and Korea. Experts estimate that the second millionth fatality will be reached in half the time it took to reach the first millionth.

Because calm fish use less oxygen, 500 instead of 200 fingerlings can be transported in a gallon of water to which has been added one half grain of sodium amytal. As soon as the fish are dropped into fresh water, they swim away unharmed. The method is in use by California fish hatcheries.

Of the first price list issued in 1877 by Eli Lilly and Company, only three items are still carried: cathartic compound, quinine sulfate pulvules, and elixir of pepsin, bismuth and strychnine. Parenthetically, the cost is 6.7 per cent lower than in 1877.

Sir Walter Raleigh, who fancied himself a doctor, had a sure-fire Rx for asthma and other chest complaints: the scales of a roach, the eyes of an eel, the teeth of a pike ground to powder, and the flesh of a perch that had been dead nine days.

The *Philadelphia Medical Journal,* February 14, 1903, carried an article by a Newark physician on the usefulness of heroin in treating various children's diseases. Nowhere in the article did he suggest that it is viciously habit forming; in fact, he said it produces no cumulative symptoms and is not toxic in any way.

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Guest Editorial

The County Medical Societies' Responsibility to Medicine

WALTER B. MARTIN, M.D., *President, American Medical Association*

One of the most interesting and successful annual meetings of the American Medical Association has recently come to an end. More than 12,000 practicing physicians and several thousand additional interns, residents and medical students were registered. The number of nurses, hospital administrators, technicians and other auxiliary health personnel ran into the thousands. The total registration of the meeting exceeded 41,000. As all of these people return to their homes, what a powerful force they can be for better health practices, if they bring back and apply information gained at this meeting.

Walter B. Martin, M.D.

In the affairs of your national association, this particularly applies to your delegates to the national House of Delegates and to the officers and other leaders in your local societies. There are many problems facing medicine today. They concern the science and the practice of medicine, doctor-hospital relations, the financing of medical care for the individual, extension of facilities, the financing of facilities, medical education, intern and resident training and the growth of federal medicine to name a partial list. All of these problems require the careful consideration of physicians everywhere. The American Medical Association is in a position to make studies, compile information and, through the medium of your state and county societies, to pass on this information to you. The American Medical Association can formulate policies, but it cannot carry them into effect without your support and cooperation. It should not activate them without assurance of approval of a majority of its members. We do not ask that you necessarily support these policies, but we do urge you to be active in your local and state societies. We do ask you to inform yourselves so that your judgment may be founded on facts and on a consideration of the medical interests of the people you serve.

An obligation rests on your state society and on the leaders in your county societies to see that pertinent information on these important current problems is brought to every member of your state and county associations. There are now 1972 county societies and district societies. It is of significance that 1705 of these have a membership of less than 100. These small societies are in a better position to influence the course of medicine than any other group. Their members are often closer to the people and by their actions and by their devotion to the high ideals of medicine they can foster and maintain the confidence of the people in American medicine.

The county society through its members should take part in all agencies concerned with community welfare, particularly those connected with health activities. As physicians in your community, it is not enough to confine yourself to the practice of medicine. The doctor should be actively interested in all matters affecting the health of his community.

At the present time the two activities that can best be carried out on the local level are the extension of insurance against the cost of medical care and for those who are unwilling to buy insurance or are uninsurable, the development of adequate methods for paying for the hospital care of those who are in need and cannot pay for themselves directly or through insurance at the time of an illness. If every local society wholeheartedly undertook the accomplishment of these two objectives, these problems could be solved to a major extent in the next three years.

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Missouri Academy of General Practice

William J. Shaw, M.D.

That nomad of Modocs, the general practitioner, was seen frequently during the 103rd annual session of the American Medical Association in San Francisco, June 20-25, 1954.

No visits were made to the Top of the Mark, Chinatown, the Domino Club, Palace or St. Francis Hotel without finding some general practitioner from Missouri relaxing. Any "Hi, Doc" called from cable cars ascending or descending Nob Hill was returned from someone on the walk. Even the serious souls attending organizational and scientific meetings most assiduously found time between sessions to wander to the Grotto on Fisherman's Warf, the Blue Fox or the Tonka room for an excellent meal.

In a meeting that registered 11,700 physicians the first four days, 153 were Missourians. Seven of the eight delegates and alternate delegates, four of which were general practitioners, listened to the deliberations of the House of Delegates and contributed to the election of Clark Bailey, an Academy member from Kentucky, as vice president of the A.M.A. A. S. Bristow was appointed teller for the meeting.

Twenty scientific sections conducted meetings during the four day assembly including the section on general practice which elected M. B. Casebolt an alternate delegate from the section to the A.M.A. Three hundred outstanding scientific papers were read, 125 scientific exhibits carefully scrutinized and 300 technical displays presented during the meeting. One of the more interesting scientific exhibits was presented by Jesse Rising, director of the Missouri Academy, on preceptorships in general practice.

The meeting opened with promise of fireworks from such controversial subjects as criticism of the National Foundation for Infantile Paralysis and the Salk polio vaccine, compulsory coverage of physicians under social security, restriction of free medical service for veterans with nonservice connected disabilities, the break in tobacco stocks following the report of the American Cancer Society and the ethics involved in joint billing to patients. After four days of sincere effort the meeting closed in an atmosphere of satisfied, if not contented, placidity, a description of which, to paraphrase one speaker, would be tantamount to "gilding the lily, carrying coals to Newcastle or rewriting the ten commandments."

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Took a week off and went out to San Francisco to the A.M.A. Didn't attend too many of the scientific sessions but I sure had a good time just meandering around the Palace and sitting in on the House of Delegates. Most of the time I would get up early . . . sort of from force of habit . . . and go on to the hotel. Sure was interesting to see the different delegates gather with other well-known medical people in groups of two, three or four with their heads together. Sometimes I would just happen to hear smidgens of the conversation and I got the definite impression that there was a good bit of horse trading going on. Don't mean to intimate that being a horse trader is a qualification for being a good delegate but I reckon it sure helps.

Don't take much looking or figuring to realize what a tremendous job it is to put on the convention. The longer I practice the more respect I have for my own organization—the A.M.A. Too bad so many of us never quite comprehend what a tremendous organization we have behind us. You know I don't ever remember anyone ever so much as mentioned the A.M.A. while I was in school. One time when the convention was in K.C., Mo., I went and then I thought it was great because we went through the exhibits and picked up a big shopping bag full of samples, literature and gadgets. Guess maybe I kept on thinking that's all it was good for . . . that is until recently.

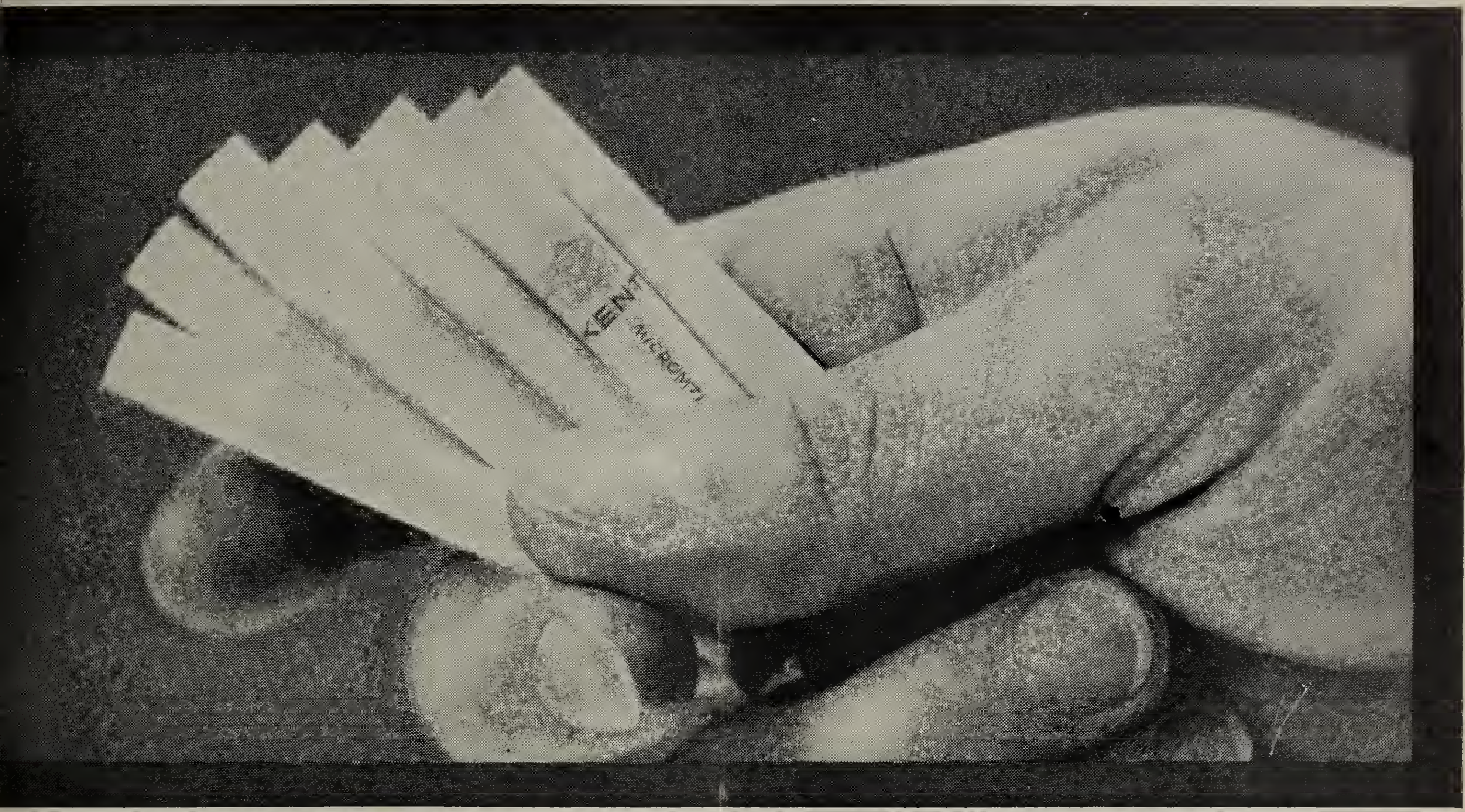
Might not be a bad idea to start telling our medical students early more about the A.M.A. . . . what it can do and does do every day for every doctor. Suppose that's the general idea behind the Student A.M.A.

Dr. McCormick in his speech called attention that some people refer to the A.M.A. as the "doctors' union." I have done that too but not the way he was talking about. It's too bad that all doctors don't know as much about the A.M.A. as the average plumber does about his union. Might be all right to require every doctor to belong before he can doctor same as in most instances a plumber must belong before he can plumb. Then every doctor would know more about the organization that represents him.

Think I'll make attending the A.M.A. an annual affair.

Your nephew,
Pete

Why is it, Doctor, that one filter cigarette gives so much more protection than any other?



The answer is simply this: Among today's nine brands of filter cigarettes, KENT, and KENT alone, has the *Micronite Filter*... made of a pure, dust-free material that is so safe, so effective it has been selected to help filter the air in hospital operating rooms.

In continuing and repeated impartial scientific tests, KENT's Micronite Filter consistently proves that it takes out *more* nicotine and tars than *any* other filter cigarette, old or new.

And yet, with all its superior protection, KENT's Micronite Filter lets smokers enjoy the full, satisfying flavor of fine, mellow tobaccos.

For these reasons, Doctor, shouldn't KENT be the choice of those who want the minimum of nicotine and tars in their cigarette smoke?

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What Is Your Hobby, Doctor?

S.P.E.B.S.Q.S.A.

Millions of Americans ridicule the "alphabetical agencies" Uncle Sam has worked out in the last two decades. But to tens of thousands of our fun-loving countrymen, the superficially grotesque line of capital letters, reproduced above, represents an organization dedicated to free-wheeling fun, nuthin' else!

As a kid back in Logansport, Indiana, our colleague, W. J. Marshall, did some singing in high school. Today, as a respected specialist in ophthalmology, he continues. Even his tenure of office last year as President of the Green County Medical Society did not dampen his ardor to carry on with the "barber-shoppers." And, lest anyone might feel this type of activity interfered with the dignity of his office, we are reliably informed by Springfield colleagues, "they loved it."

Previous to his formal association with the "barber-shoppers," he had sung with the Kiwanis Minstrel's quartet on several occasions. He has served as vice president, president and as a member of the board of directors in the "barber-shoppers" organization, the Springfield unit of which is composed of "two barbers, one other physician, an optometrist, several lawyers, several manufacturers, and many other men of various occupations."

Representatives of this and other chapters work their way up through "elimination contests," and the biggest thrill, of course, is when the "local boys make good" in the semifinals and finals. In 1949, the "Mid-States," were international "champs," and are still the "clowns" of the S.P.E.B.S.Q.S.A.

The accompanying photograph shows Dr. Marshall as the central figure. (Ed. Note—looks like a sextette from where we stand—no wonder they sound good!)

Dr. Marshall modestly disclaims any great talents as a singer, describes himself as "about average. However, I do thoroughly appreciate harmony and that type of music much better than classical music or high-brow type. I consider it purely a recreational, pleasing diversion. We have no projects except to entertain ourselves. There is a little bit of 'ham' in all of us, and we are willing to tolerate it in our fellow-members in order to be able to do a little bit ourselves."

Photography, golf, Boy Scout work, and many other hobbies also interest Dr. Marshall, but we congratulate him on his "first love"—S.P.E.B.S.Q.S.A.

Oh yes, that alphabetical scramble means Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America.

(Ed. Note: If you know of any other member with an interesting or unusual hobby, please let us know. V. T. W.)

Capsule Clinics

Irving A. Wien, M.D.

- Five general causes of ocular headache are: eyestrain, glaucoma, iritis, orbital neuralgia, and ophthalmorhinalgia. Wyrick, R.: J. Oklahoma M.J. **46** (May) 1953.

- Aureomycin, chloramphenicol and oxytetracycline (terramycin) were not effective in altering the course of epidemic parotitis with orchitis (mumps). Sutliff, W. D., and Barnes, Z. B.: Arch. Int. Med. **91** (January) 1953.

- In the presence of a head injury with the patient unconscious or in a non-cooperative condition, one must not fail to search for evidence of an associated but less obvious injury which, if undiscovered, may prove fatal. Vice versa this associated injury may be so obvious that one's sole attention is directed there, too oblivious of the cerebral injury which threatens life. Mock, H. E.: Skull Fracturs and Brain Injuries, Williams & Wilkins Co., 1950.

- Episiotomy, properly timed and executed, usually creates sufficient additional space to prevent most lacerations of the perineum. Pieri, R. J.: Am. Practitioner **4** (August) 1953.

- Until recently corneal transplantation was unusually hazardous; however, improvements in technic and instrumentation have increased the prognosis for good vision. Daily, L., et al: Texas J. Med. **49** (September) 1953.

Variety is the "spice" of the bland diet...

Variety in taste and texture of foods must become the "spice" of a bland diet now that your patient can't have sharp seasonings and strongly flavored vegetables. These "do's" will help keep his diet tempting to both eye and palate.

For the "meat" of the meal—

Suggest that beef, lamb, and poultry be roasted or broiled and seasoned with salt and mild herbs.

Meat patties stay tender when crushed corn flakes and a little water are added to the finely ground beef. Salt and a hint of thyme or marjoram give savor.

Fish soufflé—flaked fish in any soufflé recipe—is a delicate delight when the top is crisped with cracker meal and butter.

Add the "trimmings" with imagination—

Vegetables such as string beans, peas, asparagus tips, spinach and carrots may be cooked and served whole if young and tender. Otherwise they must be puréed. Potatoes may be boiled, baked, or mashed.

Salads of molded gelatin are pretty to look at—better to eat. Your patient may like one made of strained beets livened with lemon juice, chilled and turned out of the mold on shredded tender lettuce.

Desserts add the final fillip. He can try applesauce added to whipped lime gelatin, chilled and topped with custard sauce. Or for a party touch, he can sweeten chilled strained fruit, add a squeeze of lemon, and fold into whipped cream or whipped evaporated milk.

These "diet do's" will help your patient discover new combinations of acceptable foods. And he'll find his diet can be ample and interesting without straying from your instructions.

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With Our Auxiliary

Mrs. W. E. Martin, *President*

Fifteen of us enjoyed the privilege of attending the Woman's Auxiliary to the A.M.A. in San Francisco. Every day was "Ladies' Day"—June 21-25 at the Fairmont Hotel, for some 2,000 doctors' wives were all over the main lobby.

Luncheon features were: Dr. Edward McCormick, A.M.A. retiring President; Lynn Townsend White, Ph.D., President of Mills College, Oakland; an elegant fashion fur show put on by Saks.

Mrs. Leo J. Schaefer, Salina, Kansas, presided over the sessions; Mrs. George Turner, El Paso, Texas, was installed as President; Mrs. Mason Lawson, Little Rock, Arkansas, as President-elect; and Mrs. Robert Flanders, New Hampshire, as 1st Vice-President.

Mrs. Turner's slogan, "Every doctor's wife a leader in community health service," followed Dr. Walter Martin's exhorting the M.D.'s to "Guard Public Health."

The House of Delegates of both A.M.A. and the Auxiliary adopted "A personal physician for every M.D. and their family."

The A.M.E.F. received memorial funds totaling $8,000, from the A.M.A. Auxiliary—or 1/10 of the 1953-54 income ($5,472)—given in memory of deceased members; and a memorial fund totaling $2,477, in honor of Corrine Keene Freeman.

The Annual dinner on Thursday night at which husbands were guests, was highlighted by the presentation of an original comedy (and I mean comedy) written by a San Diego doctor's wife, entitled "There Is a Doctor in the House."

All this with San Francisco's cool weather and many unique attractions, made up an enjoyable vacation.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

Last month I gave a patient a series of Prostigmine injections to determine whether her amenorrhea was due to pregnancy. It was not. The other day I received a check in the mail with the following indorsement. "For professional service to Mrs. R. A.—injections for abortion 5-7-54, 5-8-54, 5-9-54."

During the present heat wave our colored girl asked me one morning, "Doctah, has you had any of those cases of heat prostitution?"

Sam had more children than you could count on the fingers of both hands.

One day I asked him how he happened to have so many.

"You know my wife is a little deaf, Doc," replied Sam. "When we go to bed, I ask, 'Shall we go to sleep or what?' and you know, every time she says 'What.' "

Jim limped into my office. A hayrack had run over his foot. The foot was sore but no bones were broken. I told him to get some Epsom Salts and go home and soak it in a hot solution.

"It's going to be all right," I reassured him, "sure it's swollen some, but that doesn't worry me."

"Yeah," replied Jim, "and if it was your foot it wouldn't worry me none neither."

Seen on the Directory of the local Post Office.

Eternal Revenue—Room 3, and it sure seems to be eternal!

Ben Bull, New Councilor from the 10th District, was proudly showing his 11 year old his name on the letterhead of the State Association.

"What do you think of that, son?" he asked.

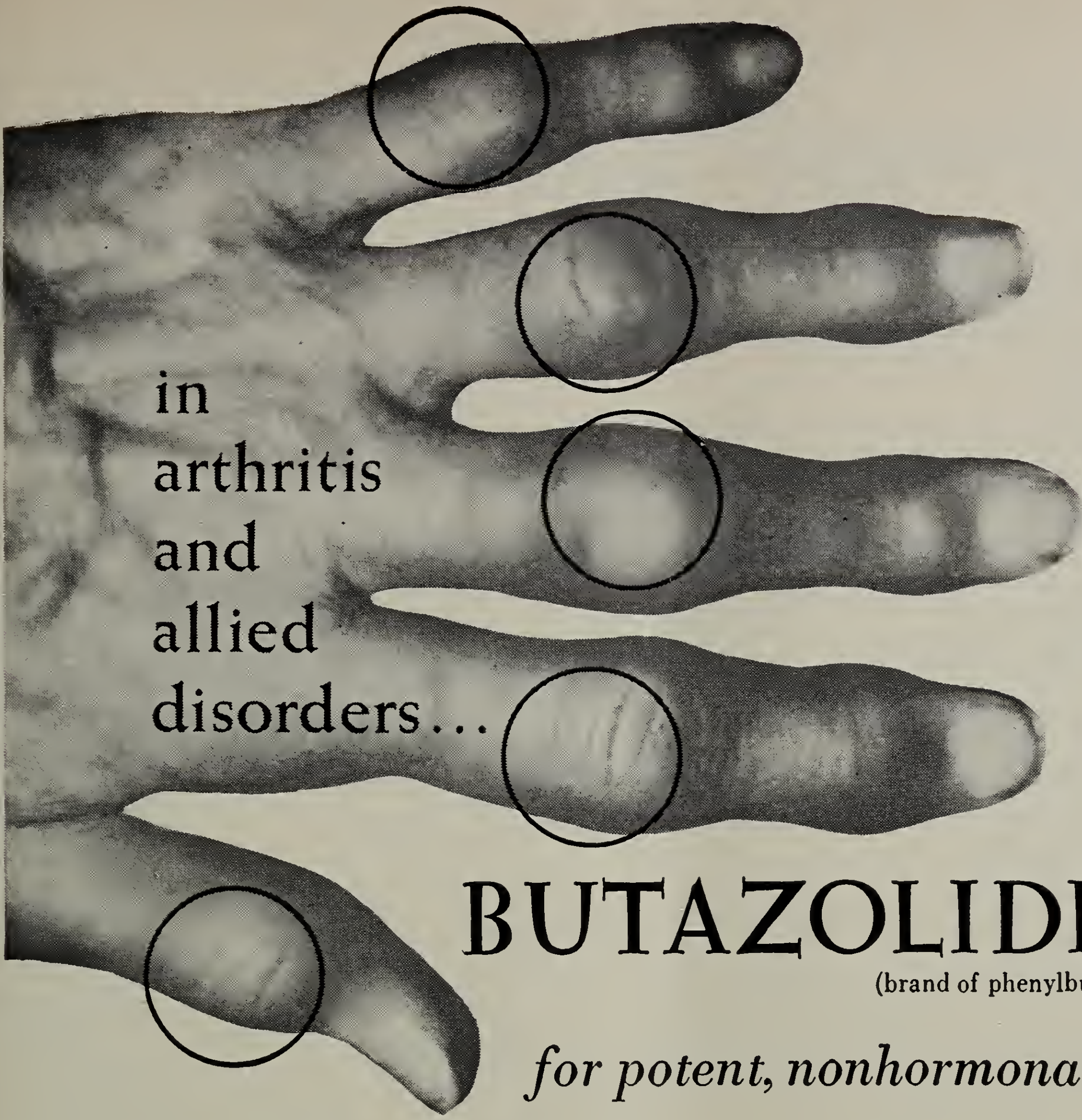
"It's fine, Dad," his son replied, "But you *are* last on the list."

While making the rounds at the hospital, I stopped to say good morning to a crotchety patient.

"Well, Mr. Jones, I see you are coughing easier today," I said cheerily.

"Why shouldn't I," he snapped, "I've been practicing all night."

My six-year-old when she has troubles usually comes to me and states the situation and always ends by saying, "and Daddy that's the thing that is probleming me." That's a very expressive new verb in my opinion.



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BUTAZOLIDIN being a potent agent, the physician should carefully select candidates for treatment and promptly adjust dosage to the minimal individual requirement. Patients should be regularly examined during treatment, and the drug discontinued should side reactions develop.

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*MacKnight, J. C.; Irby, R., and Toone, E. C., Jr.: Geriatrics 9:111 (Mar.) 1954.

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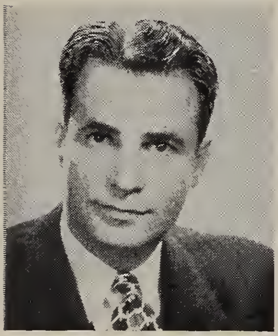
Missouri Medicine in Review

Leo H. Pollock, M.D.

SEPTEMBER, 1914



The *Iowa Medical Journal* has discontinued publication; this leaves Iowa with no medical publication except the *Iowa Homeopathic Journal,* and the *Bulletin of the Iowa State Board of Health.*

Dr. Guy B. Mitchell, of Branson, Taney County, is a candidate for the legislature; and Dr. John S. Wallace, of Brunswick, is a candidate for State Senator.

Dr. B. J. Robinson, St. Francois County Society, reports 20 members in good standing, approximately 40 per cent of the physicians. Dr. R. W. Gay reports for Iron County: Seven members in good standing, of twelve in the county. Dr. J. D. Robinson, Belgrade, Secretary of the former Washington County Society, reports they have ceased to exist. Phelps County Medical Society has 15 members in good standing, one physician in the county not eligible.

The State Board of Health is studying the vaccination status. In 1910, Missouri's population was 3,293,335; Kansas City's was 248,381, and Jackson County's 283,522. In K.C. schools, 35 per cent are vaccinated, St. Louis' population is 687,029, and 55 per cent are vaccinated.

SEPTEMBER, 1929

New appointments at the Washington University School of Medicine: Dr. Lee Wallace Dean appointed Professor of Otolaryngology, associated with Dr. Greenfield Sluder, who after 25 years is retiring from administrative duties, but will retain a clinical professorship. Dr. J. J. Bronfenbrenner, of the Rockefeller Institute (formerly of Harvard and Pasteur Institute), appointed Research Director in Bacteriology. Dr. Malvern B. Clopton, made Professor of Clinical Surgery, Dr. Glover H. Copher, appointed Associate Professor of Surgery. Dr. Warren H. Cole, is now Assistant Professor of Surgery. Dr. Helen Tredway Graham (Mrs. Evarts A. Graham), appointed Instructor in Pharmacology.

The House of Delegates recommends to the Council of the M.S.M.A. that the salary of our Secretary, Dr. E. J. Goodwin, (now $4800), be increased to $6000 annually.

The "blindfold test" of picking a brand of cigarettes received a hard jolt from Dr. Emil Bogen, of Cincinnati. He tested a mixed group—professional men, university students, and laborers, all smokers for more than three years, using an average of one package a day each, and none was able to distinguish the brands.

SEPTEMBER, 1944

His friends, at Barnard Free Skin and Cancer Hospital, have established a Dr. Frederick J. Taussig Memorial Fund for research, amounting to $11,698.00.

Dr. Major G. Seelig is editor of a volume in "Surgical Clinics of North America" devoted entirely to various aspects of cancer.

Drs. W. A. Bloom, Fayette; Howard B. Goodrich, Hannibal, and Robert Mueller, St. Louis, were speakers at an Allied Health Conference for Northwestern Missouri, at Hannibal, on August 15.

With the granting of a *pro forma* decree of incorporation to Missouri Medical Service, plans are near completion for Missouri's prepayment medical and surgical care plan, approved last spring by the House of Delegates.

Of This and That

Mark M. Marks, M.D.

Las' week I dot a bad 'told in ma 'ead. So I meekly presented myself to my friend the E.N.T. man, as a patient. In my early medical years, treatment for my small ailment would have been aspirin, steam, fluids and bed rest. But, not today—no sir! My poor noggin was insufflated, decompressed and benumbed with sprays, siphons, packs and mashes. His smiling nurse, mumbling that "it wouldn't hurt," deposited something in my left deltoid, and, as I staggered out, the doctor presented me with a dozen orange-colored, soft, slick pills, with the advice "Take these capsules and stay away from four things—all start with the letter 'S' —spices, spirits, smoke and sin!"

That set me to worrying. With the taste buds unhitched, who wants spices? Spirits I don't care for anyway, and don't use tobacco. Furthermore, I haven't sinned in so long, wouldn't know where to begin. Wonder what he tells his cash customers?

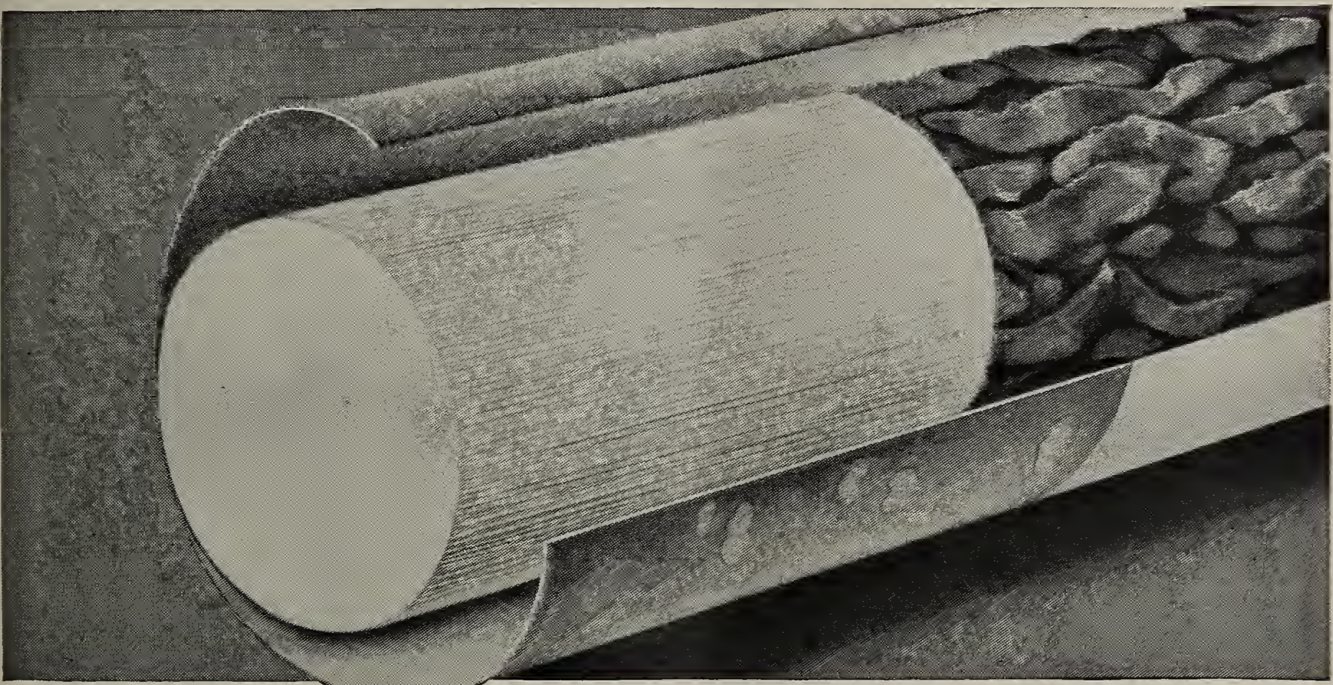
An I still dot my told.

DOCTOR, WHEN YOUR PATIENTS ASK...

"Which Cigarette Shall I Choose?"

...REMEMBER THAT NEW VICEROY GIVES SMOKERS

DOUBLE THE FILTERING ACTION!



1. NEW AMAZING FILTER OF ESTRON MATERIAL
This new-type filter, of non-mineral, cellulose-acetate, Estron material, exclusive with Viceroy Cigarettes, represents the latest development in 20 years of Brown & Williamson filter research. Each filter contains 20,000 tiny filter elements that give efficient filtering action; yet smoke is drawn through easily, and flavor is not affected.

2. PLUS KING-SIZE LENGTH
The smoke is also filtered through Viceroy's extra length of rich, costly tobaccos. Thus Viceroy actually gives smokers *double the filtering action* . . . to double the pleasure and contentment of *tobacco at its best!*

ONLY A PENNY OR TWO MORE
THAN CIGARETTES WITHOUT FILTERS

New King-Size
Filter Tip VICEROY

OUTSELLS ALL OTHER FILTER TIP CIGARETTES COMBINED

VICEROY
Filter Tip
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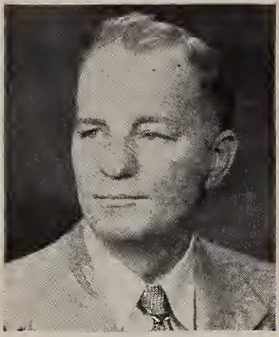
President's Comments



Committees in medical organizations are mighty important. Most of us at times tend to overlook the fact that our fellow members who serve on these committees take time out for leisure moments to give freely of their thoughts and ideas on various phases of medical practice. Only through the work of these committees can our Council and Association office function properly.

It is especially gratifying to me to report that eight of our Standing Committees have met since our Annual Session in St. Louis. In addition, one special committee has met. It gives me great pleasure to report further that the committee meetings were well attended, which is evidence of the interest of our membership. Do not forget also that these meetings were held during our hottest months, May, June, July and August. The committees which have met are those on Fractures, Medical Economics, Maternal Welfare, Scientific and Postgraduate Work, Infant and Child Care, Laboratory Medicine, Rural Health and Public Policy and Public Relations and the special committee on Hospital Licensure.

I had intended in my early planning to make a special plea urging our committees to meet, but after seeing this record, I humbly say "Thanks, Committeemen, Thanks for your help."

Harold E. Petersen, M.D.

Division of Health

James R. Amos, M.D., *Director*

Home Accident Prevention Program

The Division of Health is establishing a section on home accident prevention in its central office for the purpose of coordinating and stimulating further activities in home safety in the local health departments and county nursing services throughout Missouri.

There are some organized and concerted efforts toward accident prevention in the areas of the school, the farm, motor vehicles and industry in the state. Only limited organized effort in the field of home accident prevention exists even though public health personnel, especially health educators and nurses, have for several years included it in their programs where time permitted.

Home accidents are a matter of concern to public health workers of Missouri. They affect large numbers of people in every locality and every age group. Accidents of all types rank high among the causes of death with home and motor vehicle accidents leading.

The 1953 statistical report of the Missouri Division of Health disclosed the fact that accidents ranked fourth as a cause of death, surpassed only by cancer, heart and vascular lesions. Accident was the number one killer between the ages 1 and 35. Careful analysis of statistics in the accident field for the years 1949, 1950, 1951 and 1952 revealed that deaths from home accidents were greater than the number from motor vehicles. In 1953 the deaths from home accidents dropped below those resulting from motor vehicle accidents, but only by 29. These figures point out a need for an educational program in home accident prevention.

Although a greater majority of the home accidents occurred in the old age group, child and infant safety from accident becomes a prime factor in any child health program. Medical science has helped protect the young child from communicable diseases, but from environmental hazards or unsafe actions. In Missouri during 1953 accidents caused more deaths in the age group from 1 to 4 years than all communicable diseases combined. Almost 68 per cent of the accidental deaths of these small children occurred in their home or family environment.

The home accident problem in Missouri offers no simple solution. Science is finding new ways to fight diseases, but it cannot promise vaccine or wonder drugs to prevent accidents. However, there are methods and technics which public health workers can apply that would reduce accidents in the home:

1. The recognition of the problem by the public health workers as well as the public. This much has been done.

2. Formulating a plan of action. This is now in the formulation stage.

3. Execution of the plan. This will include such things as cooperation with professional organizations and with both voluntary and public agencies, carrying health education into the home, eliminating or correcting physical environmental defects and others. By application of these, accidents around the home can be reduced.

From the Bureau of Health Education.

Missouri Medicine

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The Febrile Convulsion

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The febrile convulsion is the most common neurologic disorder of infancy and childhood. Referred to by the laity as "fever spasms" or "stomach spasms," the episodes are dramatic and often frightening when they occur and yet are usually dismissed by both physician and parent, once the child has recovered, as one of the "phases" through which children normally pass. The frequency with which febrile convulsions occur in the infant and child population warrants an understanding of diagnosis, treatment and prognosis.

According to McQuarrie,[10] convulsions of all types are encountered approximately twelve to fifteen times more frequently in children under 6 years of age than in adults. Fever is by far the most frequent cause, accounting for from one third to one half of all convulsions in this age group.[7, 11] The most recent estimate of the number of children who suffer one or more episodes of febrile convulsions indicates that 2.5 per cent of the child population is involved.[8] Except under unusual circumstances, adults do not manifest febrile convulsions.

A febrile convulsion can be defined as convulsive activity accompanied by marked stupor or unconsciousness occurring during the course of an extracranial febrile illness. Such diseases as encephalitis, meningitis and brain tumor, abscess and trauma are therefore excluded from this category. Most frequently the convulsion occurs at the onset of the fever, and most commonly with fever due to an acute illness.

Many febrile diseases are accompanied by central nervous system symptoms of one type or another. Headache, vague visual and auditory disturbances, lethargy, inordinate restlessness or even delirium may be observed in patients with such diverse disease processes as pneumococcal pneumonia and typhoid fever. Meningismus is occasionally noted in children suffering from acute febrile illnesses—acute pyelonephritis, lobar pneumonia and bacillary dysentery are among the more common offenders—and often this clinical sign is sufficiently pronounced to warrant a tentative clinical diagnosis of bacterial meningitis. Should the febrile convulsion be categorized similarly, as merely an infantile pattern of reactivity to fever, or should its occurrence be viewed with more alarm and consideration be given to the observation that whereas one or more of the mentioned symptoms are fairly commonly seen in many hyperpyrexic states, convulsive activity is much less frequent and may indicate an abnormal type of reactivity on the part of the patient?

There are three immediate problems confronting the physician called to treat a child exhibiting convulsive activity at the onset, or less commonly, during the course of a febrile illness. Emergency treatment for the convulsive state should be designed to shorten the period of convulsive activity, to prevent bodily injury from excessive movements and to obviate aspiration of saliva and gastric contents. Most febrile convulsions are of short duration, and often the episode will have terminated by the time the physician has reached the bedside. The symptom of post-ictal lethargy, however, demands that the patient should be kept quiet and allowed to recover full use of his faculties before being unduly disturbed, except, of course, for indicated diagnostic and therapeutic procedures. Measures to reduce the height of the fever should be applied.

Secondly, an accurate diagnosis must be made. Does the convulsion merely represent the consequence of fever or is there a possibility that true intracranial disease exists? At least two diagnostic handicaps can be recognized immediately: first, acute bacterial meningitis produces many systemic symptoms common to disease of other organ systems—fever, leukocytosis, prostration, rapid respirations and pulse, vomiting and all of the various components of the state usually re-

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ferred to as "toxemia"; and, secondly, individuals in the postconvulsive state, regardless of the cause of the convulsion, frequently manifest abnormal neurologic signs and behavior, such as nonreactive pupils, transient paresis, nystagmus, altered speech, disorientation, abnormal reflexes or mild ataxia. These latter manifestations are usually of short duration, it is true, but at the time the patient is first seen their presence may render the exclusion of central nervous system disease most difficult.

The diagnosis of meningitis is suggested by signs of meningeal irritation; cutaneous petechiae are often noted in instances of meningococcal infection; joint pain and swelling should suggest the possibility of sepsis (and meningitis.) Signs of increased intracranial pressure are never found in association with a simple febrile convulsion. The presence of congenital heart disease should arouse suspicion of brain abscess or infarct. Middle ear infection and mastoiditis may serve as a focus for the development of brain abscess or thrombosis of the lateral cerebral sinus. In young infants subdural hematoma is often accompanied by fever; if evidence of head trauma is at hand, a subdural puncture is indicated. The presence of one of the common contagious diseases of childhood brings up the possibility of "post-infectious" encephalitis. A history of recent injection of pertussis vaccine demands a consideration of pertussis-vaccine encephalopathy in the differential diagnosis. If the convulsion lasts more than a few minutes, the necessity for a careful appraisal of the likelihood of true intracranial disease is greatly increased.

All of these considerations point to the importance of one valuable diagnostic procedure, namely, the lumbar puncture. The procedure is not difficult, even in infants, and examination of the lumbar cerebrospinal fluid will give, in the majority of instances, an accurate answer to the question posed at the beginning of the last paragraph but one. Infants and children tolerate the procedure exceedingly well and one should never hesitate to apply it provided, of course, a subtentorial space occupying lesion is not present. In certain patients there is no other means (aside from a dangerously prolonged observation period) by which the diagnosis of bacterial meningitis can be made or excluded from consideration.

Thirdly, if the diagnosis of febrile convulsion is made, the disease responsible for the fever must be delineated so that appropriate therapy may be begun.

These three problems confront the physician at a time when the parents of his patient are anxious and frightened, and are gravely concerned for both the immediate episode and the distant future. In many instances onset of fever and convulsion occur simultaneously in a previously well child, thus increasing the feeling of helplessness and terror. The physician must be poised, tactful and understanding.

Once the immediate situation is in hand, yet another question must be dealt with—the matter of eventual prognosis. In those instances in which the convulsion is of short duration and is not followed by post-ictal symptoms or signs one can be most reassuring, for it is distinctly unusual for evidences of neurologic damage to ensue under these circumstances. There is always a possibility that there may be a repetition of the episode with subsequent febrile illnesses, and, as will be discussed later, in a small proportion of cases nonfebrile convulsions will occur in subsequent years. In general, one can say that the prognosis for an isolated febrile convulsion in an otherwise normal child is excellent. If, on the other hand, the convulsion is a prolonged one, or occurs in association with fever of only moderate degree, or is associated with protracted post-ictal symptoms, the likelihood of repeated convulsive episodes in the future is vastly increased. Febrile convulsions are particularly apt to occur, and to recur, in those children with a preexisting neurologic defect, whether the defect be congenital or acquired.

It is of the utmost importance that each case of febrile convulsion be thoroughly investigated; not only must one be certain that it is truly "febrile" in nature, but it is only by taking into account the history and the results of physical examination and indicated diagnostic procedures that a considered judgment as to prognosis can be offered.

One of the most interesting features of the febrile convulsion is the age frequency pattern. Many authors point out that the vast majority of patients are young children and emphasize the rarity of this diagnosis in the adult. One difficulty in the interpretation of these observations lies in the fact that acute infections are particularly frequent in childhood. Herlitz noted that 79.6 per cent of the 776 patients in his series had acute pharyngeal infection; however, no data were offered by which the risk of febrile convulsion could be calculated for the total number of children with such infections.[4] Peterman, in a study of 2,500 cases of childhood convulsions, noted that one third of them were associated with acute extracranial infections.[11] In the 6 to 36 month age group almost one half of the patients fell in this category. However, the data do not permit one to ascertain the number of children with febrile diseases who did not have convulsions. Both this study and that of Herlitz were based on observations made on children who presented themselves at the hospital or clinic with the complaint of convulsions.

It is with these difficulties in mind that we recently undertook to study this problem, utilizing a somewhat different approach. Instead of starting with the symptom of convulsion as most previous authors have done, we began by selecting a particular febrile disease and then analyzed the records of patients with this disease to ascertain the frequency with which convulsions were noted at various ages. We chose to study cases of bacteriologically proven shigellosis. The following table sets forth the results of the study, which included all cases of this disease admitted to two hospital services in a given period of time. When the data are compiled in this manner, it is evident that a definite age pattern exists: febrile convulsions are quite uncommon in the quite young infant with shigellosis, occur with surprising frequency in children between the ages of 1 to 5 years, and then become increasingly less common as the subjects age.

TABLE 1.
SHIGELLOSIS—INCIDENCE OF CONVULSIONS

	Children's Medical Center, Dallas		*Strong Memorial Hospital, Rochester*	
Age Group	*Number of Cases*	*Per Cent Convulsions*	*Number of Cases*	*Per Cent Convulsions*
Under 1 year	40	5	9	22
1-2 years	20	30		
2-5 years	21	19	25	48
5-10 years	11	18	14	15
10-15 years	2	0	9	0
15 years and over	19	0	42	0
Total	113	12	99	16

Just what the mechanism is behind this observed age distribution is not entirely clear. Attempts to explain it on the basis of brain "immaturity" are defeated by the lessened vulnerability of the tiny infant as compared to the preschool child. The human brain undergoes considerable chemical maturation during the first year or two of life, available data indicating a decline in water content and increase in total lipids and cerebrosides; ascorbic acid content of the infantile cerebral cortex is almost twice that of the adult.[1] Animal experiments have shown that brain tissue in the young has a higher rate of potassium exchange than in the adult.[5] Data of this sort are too few to permit the construction of an hypothesis on this basis, however. From the standpoint of behavior the infant reacts at a subcortical level during the first few months of life, and it is known that myelinization of the nervous system is not complete until about the fifth year. Changes in electrical activity of the brain from birth to adolescence shows some correlation with the age curve of febrile convulsions. Electroencephalographic tracings of normal young infants show slow waves of low amplitude, or what is termed a quiet record. A definite occipital alpha rhythm first makes its appearance between the fourth and ninth month of life; the wave frequency remains slow during childhood, however, and does not assume the normal adult pattern until about the time of puberty.

Gibbs and coworkers have shown that the appearance of high amplitude slow waves in response to hyperventilation is much more frequently observed in 3 to 5 year old subjects than at any subsequent age and, also, that the magnitude of the response is greater at that age.[2] Kellaway's observations indicate that there are a number of definitive wave sequences which characterize the drowsy state just before sleep and early sleep itself, and that these waves first make their appearance at 3 to 6 months of age, reach maximal expression during the second and third years, and then gradually decline in importance during later childhood. This same age pattern characterizes the reactive arousal reaction of infancy.[6] Gibbs and Gibbs have plotted age frequency distributions of a number of wave sequences.[3] Steady slow activity during drowsiness and arousal from sleep and paroxysmal slow activity during drowsiness all appear in infantile records during the first year of life, become maximal during the preschool years, and are then noted less and less frequently during later childhood, finally disappearing entirely in early adult life. The puerile pattern is obviously distinct from that of the adult, and the age change in brain wave activity shows an obvious parallelism with the age curve of susceptibility to febrile convulsions. It is evident that the child's brain lacks the degree of electrical stability possessed by the adult, and that the observed age incidence of febrile convulsions represents a definite biologic phenomenon.

It should be pointed out that there are certain predisposing factors known to be operative in febrile convulsions. Children with a central nervous system deficit are much more apt to exhibit convulsive activity with fever than the normal child: the mongoloid, the brain injured child and the child with a congenital anomaly of the brain are good examples. Hypocalcemia lowers the convulsive threshold. Herlitz noted that infants with tetany were particularly subject to febrile convulsions and that convulsions occurred at lower body temperatures in this group than in subjects without tetany.[4]

It is generally agreed that most children who have convulsions during the course of acute extracranial febrile illnesses do not show a tendency to have convulsions of any sort during later life. Wegman has shown that young kittens are much more susceptible to the convulsive properties of artificially induced fever than the adult cat.[12] The electroencephalographic data, referred to previously, certainly indicate a relative lack of electrical stability of the brain in young children. In many respects the childhood reaction to febrile illness, as regards height of temperature, degree of prostration, severity of metabolic derangement (e.g. ketosis, dehydration), is more violent than that of the adult. All of these considerations lend support to the adage that "l'enfant se convulse comme l'adulte frisonne,"[4] and many are willing to accept this as stated.

There is a growing body of evidence which suggests, on the other hand, that this teleological approach does not provide a complete answer. The question naturally arises as to why some children suffer febrile convulsions while others under similar circumstances do not. There have been a few attempts to answer this question. Some are distinctly biased because the case material has been drawn from clinics to which children with convulsive disorders are referred for consultation.[7, 8, 9] Although many of the published studies on this problem are deficient to some degree, the information they do provide is of some interest.

The observations of Herlitz[4] and of Margaret Lennox[7] indicate that for patients with febrile convulsions the members of the immediate family have a higher incidence of convulsions of all types than is the case in control groups of children. The risk of repeated convulsions is greater in those patients whose parents or siblings have had convulsions. Personal experience over a number of years in the convulsive clinic at the St. Louis Children's Hospital has convinced me of the frequency with which a positive family history, either febrile convulsions, epilepsy or migraine, is obtained in these cases. In about 40 per cent of adult epileptics a history of febrile convulsions during childhood can be obtained. Margaret Lennox notes that an appreciable percentage of patients have abnormal electroencephalograms, and that the magnitude of the abnormality has a direct bearing on ultimate prognosis for recurrent convulsions. Furthermore, electroencephalograms of the parents of these patients show abnormalities in 45 per cent of cases.[7] W. G. Lennox considers the febrile convulsion to be an "unusually pure culture of epilepsy," as a seizure tendency "limited by the stabilizing influence of age."[8] It may be said that to a certain, but as yet inexactly defined, extent the ancestral backgrounds of febrile convulsions and epilepsy have something in common.

All of these data point to a definite connnection between febrile convulsions and epilepsy; just how definite the connection is is not known and a precise evaluation of the eventual prognosis for an isolated febrile convulsion in an otherwise normal child is not yet at hand. The private practitioner is in a splendid position to study this problem; he is usually well acquainted with the families of his patients, follow-up periods can be long, and the totality of the patient can be evaluated over a significant period of time. It is only through the observations of many students of disease that we may expect a more scientific analysis of the real meaning and the prognostic significance of this important pediatric problem.

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Slow Down

. . . Sit down. The seat of your pants is one of your most valuable professional possessions, and, when used, inspires the patient with the feeling that you are not in a rush and are personally interested. Don't use a history sheet. Concentrate on the talk. Tell the patient . . . that more information is necessary . . . then comes your systematic inquiry.—Ralph T. Richards, M.D., Editorial, *The American Surgeon*.

Calcium in Pregnancy

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Calcium, which forms more than 90 per cent of the skeleton, is essential for bone and tooth growth and development. Its other functions include iron sparing qualities, the activation of enzymes, action as an ion balance, and a role in the physiology of nerve conduction, blood coagulation and muscle contraction.

Pregnancy causes an increased demand for calcium and the National Research Council estimates the daily requirement is 1,500 mg. Its utilization and deposit in the tissues of the growing fetus is greatest in the last few months of fetal life.[1] Some factors favor and others depress the utilization of calcium in the diet. A deficit of vitamin D, steatorrhea, phytic acid in oatmeal,[2] jaundice, oxalates in spinach,[3] and excess fluorides in drinking water are some of the factors which interfere with calcium absorption. The presence of bile salts in the intestinal tract, a slight acidity of the intestinal contents and adequate dietary proteins favor absorption of calcium from the intestinal tract.

All investigators feel that the diet alone is inadequate in supplying calcium and that to meet the demands of the gravid woman a mineral supplement is necessary. It is estimated that children utilize about 20 per cent and adults 30 per cent of their ingested dietary calcium. Mull and Bill[4] found a definite decrease in serum calcium in their determination on a large group of pregnant women.

The mineral supplements supplied by most pharmaceutical companies contain dicalcium phosphate and its general use has encouraged the assumption that it was the calcium salt of choice. Because of the presence of calcium fluoride in bones, bone ash and bone meal may cause a decreased utilization of calcium.[1]

Page and Page,[5] however, in making a ten year study have brought attention to the relationship between certain tetanoid type ailments in pregnant women and decreased calcium absorption. They felt that this was produced by the ingestion of the phosphate salt in the diet and in mineral supplements and resulted from the inverse ratio between calcium and phosphorus. They successfully treated this syndrome by the administration of a phosphorus free calcium salt and corroborated this improvement with biochemical findings.

Newman[6] showed that the ionized calcium level was slightly depressed by the administration of dicalcium phosphate and vitamin D.

Leichsenring and his associates[7] concluded that the phosphorus in the mineral supplements fed to seventeen normal college women appeared to be the factor in depressing their calcium retention when compared to the calcium levels of the same group when their diet was supplemented by calcium alone.

Gross, Wager and Loving[8] in a carefully controlled study clinically treated the tetanoid like syndrome and demonstrated with biochemical studies the advisability of using phosphorus free calcium supplements in pregnancy.

This tetanoid like syndrome seen in gravid women manifests itself by painful tetanic contractions of the gastrocnemius muscles. They may occur while the patient is asleep and are at that time severe enough to awaken her. The patient may experience these leg cramps at any time that she stretches or changes her position. The cramps are not only confined to the lower leg but are also experienced in the thighs, buttocks and abdominal muscles. There are individual variations, for some women with apparently lowered thresholds complain of these cramps bitterly and others deny having experienced them.

Not all strata of life are susceptible to this syndrome. These symptoms are not as prominent among clinic patients as they are among gravid women in private practice. This might be partly due to the feeling by the private patient that since she is paying for her care she is entitled to relief of the pain. However much this may play a role, the diet of a clinic patient is not as rich in the more expensive high protein foods and this fact alone, according to Page and Page, is the main reason. In corroborating these theories, I would like to present the findings in a study of four groups of women.

GROUP I

One hundred three patients from the Obstetric Clinic at the St. Louis City Hospital No. 1 were studied. The patients were all taking a prenatal supplement containing dicalcium phosphate. Of this number only five patients, or 4.8 per cent, complained of leg cramps. Sixty-five others admitted upon close questioning the presence of the tetanoid like syndrome but assumed that this usually occurred in pregnancy and was normal. Of these seventy women 80 per cent had no milk in their diet, the calcium intake being supplied by a dicalcium phosphate supplement only. Of the thirty-three patients experiencing no cramps 78 per cent received no calcium from milk but obtained it from the prenatal supplement.

GROUP II

Fifty gravid women studied in the Washington University Clinic were again on the poor dietary

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phosphate intake of clinic patients and received no dicalcium phosphate supplements. Of this group no patients complained of the tetanoid like syndrome but, upon questioning, 30 per cent admitted having experienced them. These two groups of patients from separate hospitals were greatly relieved of their symptoms by the administration of aluminum hydroxide gel which causes a rise in the ionizable calcium concentration of the blood.

GROUP III

In my own private practice, 562 consecutive gravid women were observed. Of this number, 125 were receiving no mineral supplements but were on a high protein diet and one also rich in dairy products. The tetanoid like symptoms were complained of in sixty-one or 48 per cent. The remainder (437) were on mineral supplements containing dicalcium phosphate in addition to a high protein diet. Of this number 106 or 24 per cent complained of the painful muscle contractions. Therefore, a total of 186 of 562 or 33.1 per cent in the private practice group complained. At no time were these 562 patients asked if they had leg cramps so the number who suffered but assumed they were normal is not known. Of importance is that among the complaining groups the cramps were present seven times as frequently in the high protein diet group as in the clinic patients. The prenatal supplements employed among this group of patients were made by different pharmaceutic houses and all contained dicalcium phosphate or tricalcium phosphate. These patients were not relieved by increase of the mineral supplement but quite often the contractions were stopped by the administration of large doses of synthetic vitamin D.

GROUP IV

The fourth group of patients studied was thirty-five patients placed on the usual high protein diet but supplemented with a phosphorus free mineral supplement* containing aluminum hydroxide gel. These patients were asked to watch for the appearance of the painful muscle contractions and were followed throughout their pregnancy. Of these patients only one experienced the syndrome and she was relieved promptly by an increase in her intake of the supplement, an action which caused no relief among any of the 562 patients who received supplements containing phosphorus in the third group studied.

CONCLUSIONS

1. The clinic patient with a poorer diet of proteins does not experience the cramps as frequently as patients seen in private practice.
2. Aluminum hydroxide gel and large amounts of vitamin D relieve these painful muscle contractions.
3. Phosphorus free mineral supplements containing aluminum hydroxide gel, even when used in patients having a high protein diet, are strikingly free from producing this syndrome.
4. These clinical studies corroborate the findings of several other groups of investigators published in recent medical literature.

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Credo

Medicine knows no race, creed or color, but only the sacredness of human life. May it always be the servant of all, but the hireling of none. Greatness of the profession will remain as long as we look at the ills of man through the clear light of service and not through the colored glasses of wealth and selfishness.

I believe that no profession offers better opportunity for growth in moral and ethical stature, for contribution to the welfare of society, and for the relief of individual human suffering. I believe that no profession permits the practitioner to approach so closely the goals of kindness, loyalty, devotion and consecration as does medicine.

We are the most favored of all in the scope of human endeavor. If you find, as you must, flaws in the wide surface of the portrait that represents us, I believe them to constitute only a challenge to us to strive more diligently toward perfection. Remember, it is always the duty of the physician to help cure when possible, to relieve often, and to comfort and support always, ever bearing in mind the fact that we treat the patients, God cures them.—James L. Hamner, M.D., President's Address, Medical Society of Virginia.

In Perpetual Hot Water

. . . Housewives' eczema of the hands is a skin problem peculiar to itself. It is caused by two main factors, local trauma and basic predisposition. The usual local trauma is overuse of soap and detergents. The basic predisposition is lowered threshold of irritability of the skin due to a variety of factors known and unknown. Treatment must begin with protection of the hands from continued trauma, especially soap and detergents. Local treatment with aluminum acetate hot soaks has been useful in our cases provided they are done properly and no grease is used in connection with them.—Martin F. Engman, Jr., M.D., St. Louis, "Eczema of the Hands in Housewives," *Southern Medical Journal.*

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* Calcisalin supplied by the Harrower Laboratory, Inc., Jersey City, N. J.

Scars

Prevention and Treatment

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THE SCAR, following trauma or surgical operation, is too often the hallmark of the surgeon in the eyes of the patient, his family and friends. A large healed wound of the abdomen or thoracic wall, no matter how wide or narrow, thick or thin, red or white is usually regarded by the bearer with pride. To him the function and arrangements of the contents unseen within are secondary; yet, let a tiny thick red scar on the nose, or an irregular white contracted line on the cheek, or grey blue tattoo scar from retained dirt in the forehead be evident and there exists a psychologic imprint which may greatly concern the wearer. Too often these slight disfigurements nullify the effects of good surgery. In the prevention or minimization of scars following trauma and for the removal of such scars, the sine qua non is the knowledge of the fundamentals of wound healing and of almost equal importance is the surgeon's technical effort in the application of these principles.[1]

FACTORS AFFECTING WOUND HEALING

A. **In Locale of Wound:** 1. *Blood Supply.*—Wounds in areas in which the blood supply is abundant (such as the face) tend to heal rapidly, whereas, wounds of the buttocks, back, thigh or calf, wherein there is much less blood flow, heal more slowly. Infection, especially of the anaerobic type, occurs more commonly and is of much more serious nature in these relatively bloodless areas. Sutures can be removed more quickly from facial wounds than on these other areas, partly because of the better blood supply and, also, because of less tissue turgor.

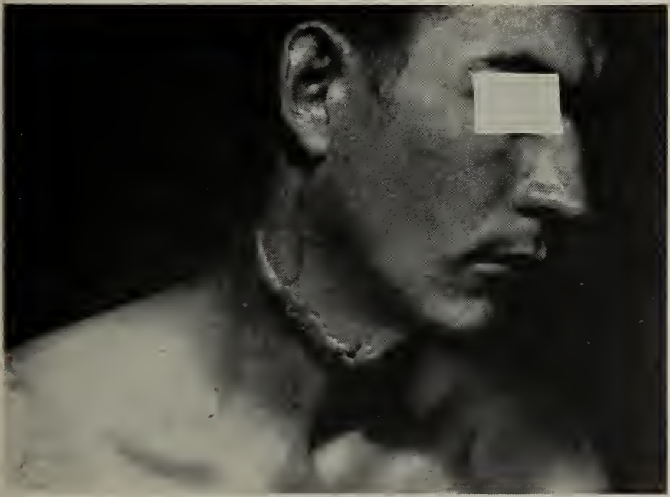

Fig. 1. Ingrown hair of beard contributes to thickness of massive keloid like scar, following a burn, even though healing in the lines of skin tension.

2. *Foreign Bodies.*—To any foreign substance there is a tissue reaction. This is inflammatory with the early changes of exudation and cellular infiltration followed by fibrosis which may be quite excessive. Around foreign bodies of inorganic nature such as pieces of metal or rock some fibrous tissue is formed but massive reaction may take place about organic material such as wood or wool. The patient's own dead tissue or incarcerated hair[2] (fig. 1), dead or alive, is reacted to as a foreign protein and even blood or serum out of tissues, especially in quantity as might occur when dead spaces remain in the depths of the wound, produces fibrosis. Certainly, the amount and type of suture and ligature material used affect the laying down of fibrous tissue.

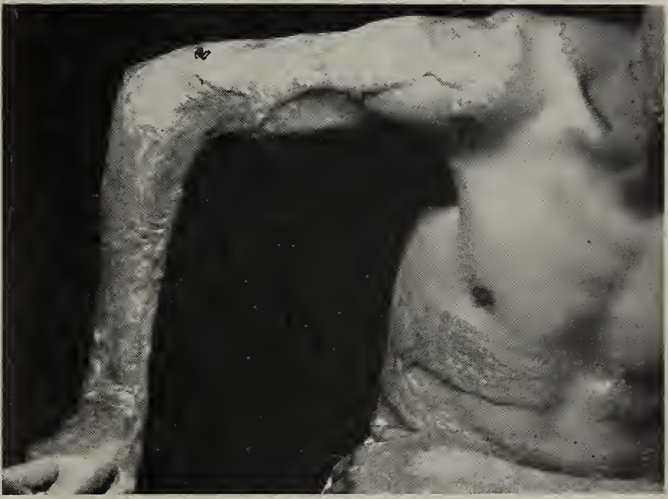

Fig. 2. Keloid type scars (same patient as in figure 1) following burn with infection of long standing in granulation tissue.

3. *Infection.*—There is no doubt as to the amount and appearance of residual scar in the rapidly healed clean wound and in the infected wound. The longer the infection is present and the greater the degree, the more the scarring (fig. 2).

4. *Immobilization.*—Rest, in spite of the seeming paradox of the efficacy of early ambulation, is still a cardinal factor in wound healing. Continued motion as can be seen in wounds about joints allowed to move uninhibitedly during the healing period produces massive scars (fig. 3). A wound at rest by a splint, cast or pressure dressing is less red or edematous early and, late, is softer, thinner

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and more pliable compared to one allowed to be in motion.

5. *Tissue Tension.*—Incisions or wounds under tension heal with excessive fibrosis.[3] Planning or closing incisions or lacerations in the lines of skin tension (Langer's lines; in general, following the normal skin creases) will produce minimal scarring (fig. 4). Wounds perpendicular to these lines, especially over the flexor surfaces of joints where the skin is often in motion, will heal often with massive band-like scars. This principle is frequently neglected by general surgeons in the planning of skin incisions with poor functional and cosmetic results (fig. 5). Tissue tension may produce thick scars over the deltoid, upper anterior chest wall in women, or post auricular region in spite of the direction of wound closure.

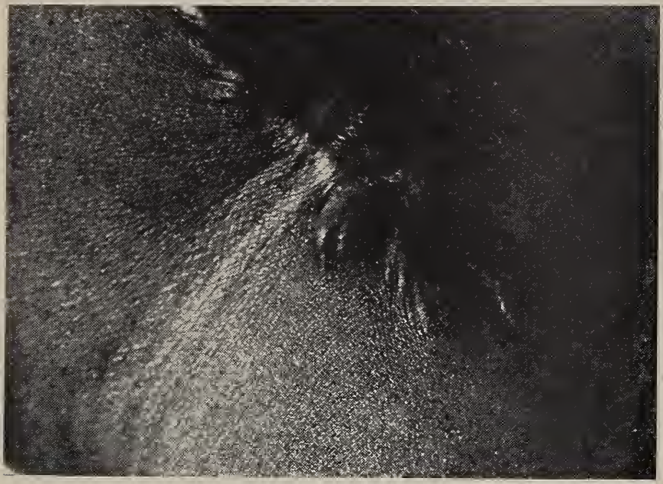

Fig. 3. Scar from incision to remove a lipoma which was made perpendicular to the lines of skin tension at the antecubital fossa. Note massive keloid like scar.

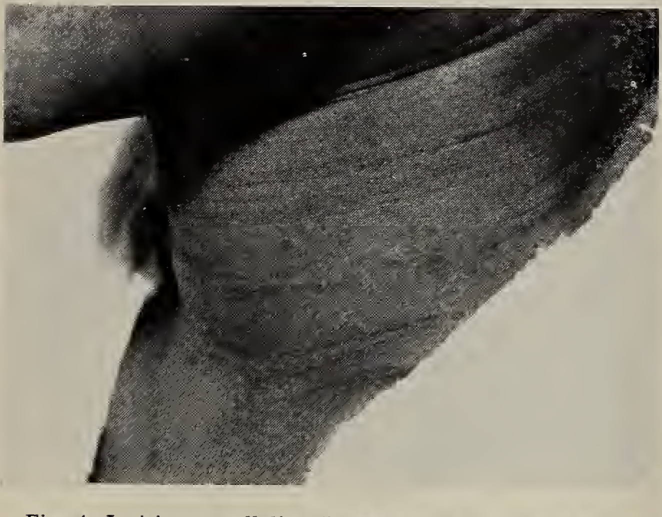

Fig. 4. Incision paralleling Langer's lines, healed so as to be scarcely noticeable (same patient as in figure 3).

B. **General:** Racial, endocrine and dietary factors affect wound healing. The tendency toward keloid or hypertrophy of scar formation is well known in the Negro (fig. 6). Heavier scars are often seen in the young in whom growth is rapid and in periods of endocrine stress such as in both sexes at puberty, in females during pregnancy, in patients with thyroid dysfunction, or in those who have had great stress phenomena with the subsequent endocrine, especially adrenal, hyperfunction.

Following a severe burn, massive scar formation has been observed[4] in a patient previously known to produce only thin scars following minor trauma or surgery. This fibroblastic proliferative tendency may go on for a long time. One should hesitate before operating on a patient still in the proliferative stage (fig. 7) for fear of adding more scar on scar.[5] The ordinary process[6] without excessive endocrine effects is complete at six months, allowing revision of scars at that time (fig. 8).

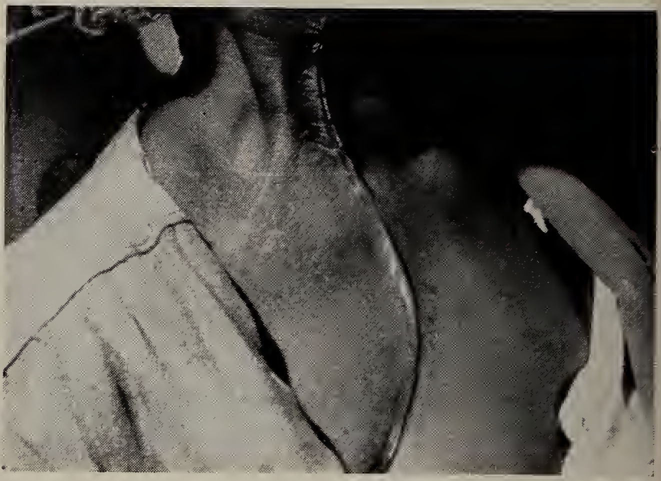

Fig. 5. Healed incision for exploration of innominate aneurysm. Band scar resulting from crossing lines of skin tension.

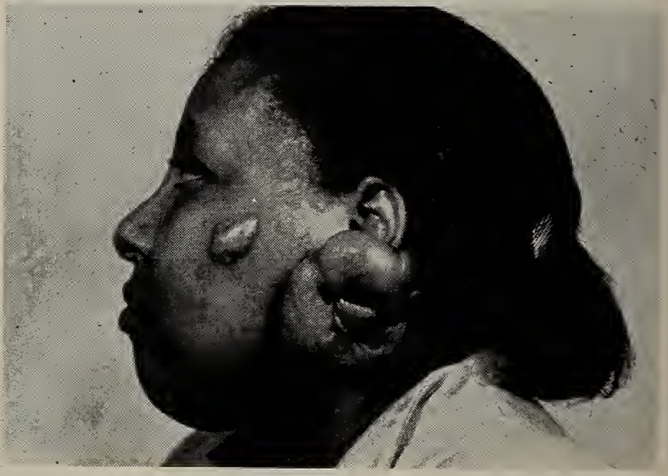

Fig. 6. Largest true keloids occur most frequently in Negroes and often follow unknown or insignificant infection or trauma as in this woman who had her ear lobes pierced for earrings.

TREATMENT

Wound Care and Closure.—The practical application of these fundamental principles gives the quickest healing with the best functional and cosmetic results. The surrounding skin is carefully washed with bland soap and water, protecting the wound itself by a sterile dressing. The wound is flushed with sterile saline and redraped and, then, with a change of gloves and instruments, the wound should be explored carefully to assess the damage (fig. 9). Debridement is minimal in the face and hands, removing only the obviously dead tissue. Closure is made from the inside out, suturing fascial layers principally. Dead spaces are closed, clots evacuated, foreign bodies all removed including dead tissue, and the wound edges are brought perpendicularly together. Such closure may require slight undermining out into subcutaneous tissues. Gentle handling of the wound only with hooks or with fingers gives the best results.

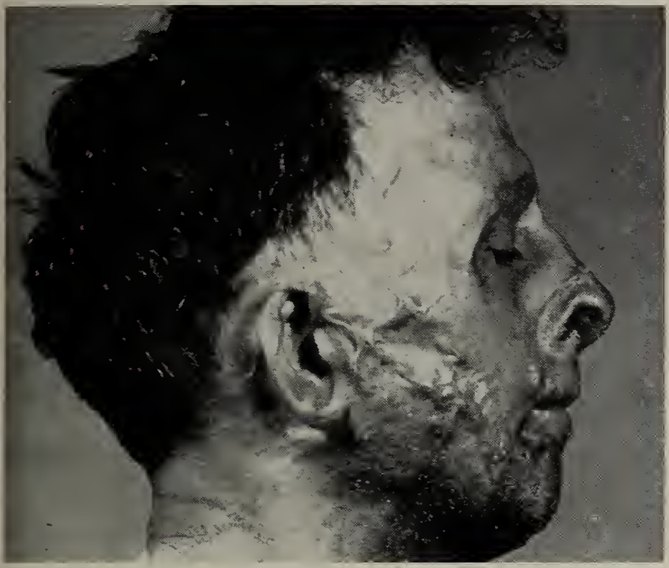

Fig. 7. Hypertrophy of scar, three months, following a severe burn.

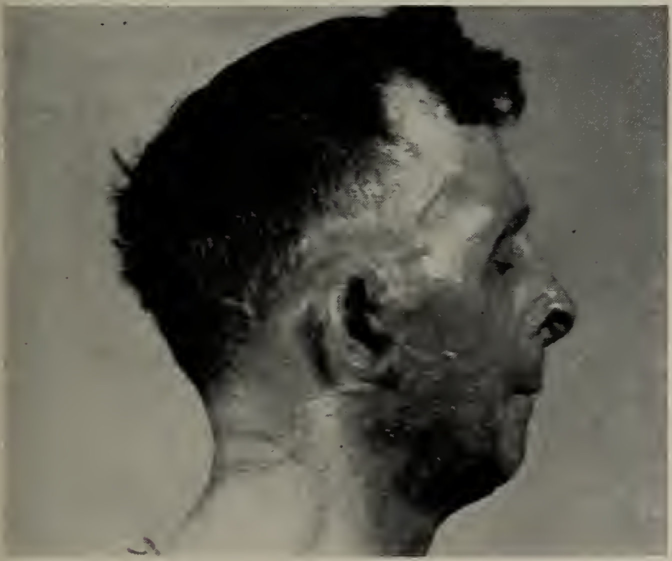

Fig. 8. Resolution of scar six months later than shown in figure 7.

The finest ligature and suture material possible should be used, the gauge depending on the need for strength. In general, for holding deep fascia and firmer structures, heavier material (00 and 000) is allowable but in the subcutaneous tissues and skin the finer the nonabsorbable suture that will hold, the better. White silk, 4-0, 5-0 or 6-0, is preferable as dermal or subcuticular sutures interrupted and placed upside down with the knot deep so it will not work up through the wound so readily during the healing stages. White silk does not show through as does black silk. Fine catgut is satisfactory but causes more early reaction. Any suture may be extruded at the wound margin up to several months after the repair.

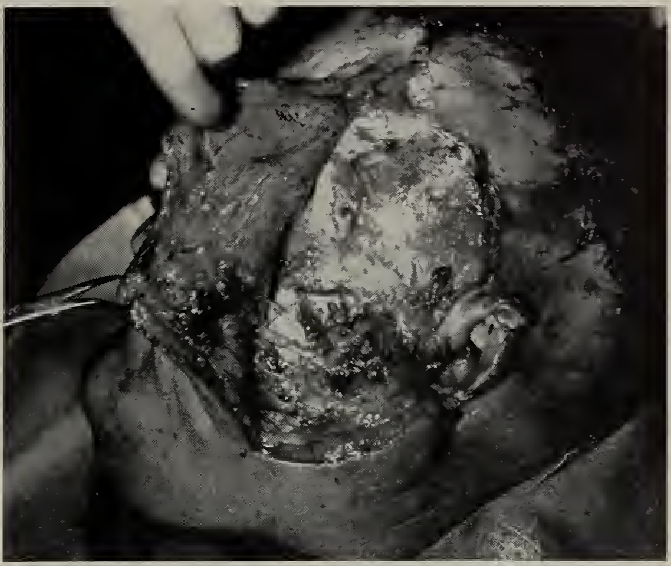

Fig. 9. Extensive soft tissue facial wound with deep damage.

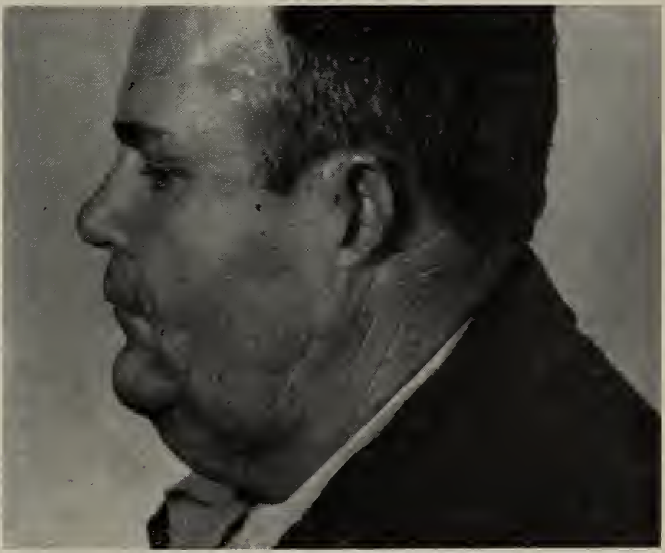

Fig. 10. Healed scar six months later, scarcely noticeable. Repair done immediately in layers with fine subcuticular suture.

Such a closure requires much time and meticulous care (fig. 10). When the wound is closed in layers, including the dermis, it is scarcely necessary to put in skin sutures. These are usually put in loosely to avoid suture marks and strangulation made worse by wound edema. The 6-0 black silk sutures are placed 1 to 2 mm. apart and at the same depth in the corresponding sides of the wound. One never needs to use tension sutures about the face or neck. To close without tension after skin loss, some other method of closure such as undermining, a rotation flap, or a skin graft is necessary.

On completion of closure, if there is a tendency toward collections of blood or serum, or if dead spaces are suspected because one doubts good layer closure, a pressure dressing is important. Drains are rarely ever needed in facial wounds except for wounds penetrating the maxillary or frontal sinuses or for some compound fractures of the mandible. Drains can be brought through into the mouth or nasal cavity from the antrum to avoid scars of the skin. Although deep or large wounds are put at rest mostly by pressure dressings, for superficial wounds it is often better not to put on any dressings at all but to keep the suture line quite clean, wiped off with saline, or sealed only with collodion. The sutures in facial wounds are removed at not later than three or four days and most often within forty-eight hours.

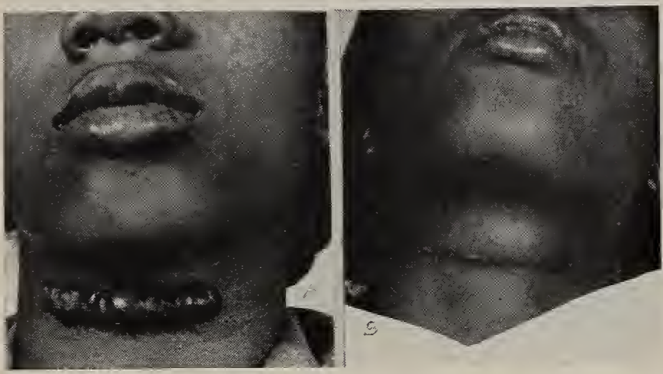

Fig. 11A. Keloid on neck from insignificant trauma. B. Healing scar at three months, following excision, meticulous closure, radiation therapy on fifth postoperative day.

Supporting antibiotics are rarely indicated prophylactically. Anaerobic infections are rare in facial wounds. One may feel the necessity of tetanus antitoxin or a booster dose of toxoid but gas gangrene antitoxin is not indicated.

Since a healed wound is a closed wound, one should make every effort to close the wounds of the face at once. This may require skin grafting when there is an avulsive loss of tissue. Since the face and neck are so mobile, undermining and closure is usually possible. A rotation or sliding flap, utilizing local tissue, may be necessary but practically never is a direct flap from a distant source indicated to close facial wounds. If there is loss of tissue in depth, a skin graft dressing will produce a cleanly healed wound quickly, avoiding the fibrosis and distortion from the lengthy healing of an open wound. Subsequent tissue shifts can be effected electively in unscarred tissue later. Full thickness grafts (meaning free grafts, not pedicled flaps), since they give the best functional and cosmetic results, are often employed definitively for elective coverage of skin losses.

The timing of closure of facial wounds early is different from wounds of the rest of the body. Ordinarily one would not dare close a potentially contaminated wound or certainly an infected wound. Since it is so important to get early closure of wounds of the face and hands and since the blood supply is good, facial wounds can be closed quite late, even after forty-eight and seventy-two hours. The surgeon must weigh the dangers of infection from late closure with the severe scars resulting from leaving the facial wound open.

Wounds closed paralleling the lines of skin tension will give minimal scar formation but those perpendicular to the normal wrinkles or tension lines of the skin will produce thick scars (figs. 3, 4, 5, 6). This is important in facial wounds and other parts of the body because, wherever possible, healed wounds should not cross the flexion crease lines, especially in the neck, palm of the hand, antecubital fossa, popliteal area and forehead. With a little planning and designing the suture line can be made to parallel the tension lines in a much better manner. Occasionally it is necessary to resort to additional incisions by a z-plasty or local flap rotation in order to change these lines. This can be done from the beginning if one understands the principles of transferring tissues without disturbing blood supply and handling tissue gently.

In the healing of a wound, when one fears a hypertrophic scar or keloid formation, and for wounds in a patient known to form thick scars, the use of radiation therapy may help in the prevention of such thick scarring (fig. 11). The empiric use of radiation therapy quite early following the wound repair may help minimize thick scar formation in more than 50 per cent of patients. The dose is small, not to exceed three quarters of a skin erythema dose. This is best given within the first week, perhaps at the time of the removal of the sutures, two or three days for facial wounds, and a little later, perhaps a week, for other wounds. It can be given before the sutures are removed. A smaller dose can be given once later, at six to eight weeks, if some scar hypertrophy is noted.

Although many substances have been advocated for the prevention and treatment of scars and keloids, since the fundamental factors that initiate repair and, then, inhibit it at the right time are not known, no preventive medication is known to date. Aside from x-ray therapy which does help, other substances advocated such as kutapressin, hyaluronidase, and cortisone have not been generally accepted as efficacious. Vitamin E and, perhaps, vitamin C in large dosage, helps control the itching and burning[7] but does not prevent or shrink scars and keloids.

The reactive fibroplasia during wound healing is phasic (figs. 7, 8). Scars build up in thickness, redness and firmness with the increased fibroplasia during the first two or three months in their normal course. A period of resolution has ordinarily taken place at the end of which (about six months after injury in most patients) is the correct time for revision of the scars. The scars, when ready, have become thinner, whiter and more pliable. If operation is performed early during a period of proliferative fibroplasia, scar might be added on scar with a worse result.

The correct time may vary greatly. In some people it may be a full year or even two; in others, it is by the end of four months after the wounding. In general, the greater the stress, the greater the tendency toward proliferative fibroplasia. The scars in younger patients show this tendency much more than in the older age group.

SPECIAL CONSIDERATIONS

In the revision of scars, one should follow technically the principles already outlined. Since scar surface itself may not heal well, incision should be made in good tissue at the juncture with the scar, cutting out all of the scar back into good, soft, viable tissue with good blood supply. Undermining laterally into the subcutaneous tissue until closure can be obtained without tension may be a matter of judgment as to extent. If removal of the scar bed itself would cause a well healed but depressed area, the bulk of the scar minus its epithelial surface can be left in and covered over by bringing the undermined edges together over the top of it without tension. If much surface loss has occurred and there has been prolonged healing with its inevitable contracture from the later maturation of granulation tissue, the incision across the scar into normal tissue makes the wound suddenly gape or even pop open tremendously. The defect is many times as big as was the scar bed. Under such circumstances the exigencies of the local wound determine the definitive secondary repair. A split skin graft may give the simplest complete coverage but a full thickness graft or the undermining and shifting of local tissue, since these may be better cosmetically for texture, suppleness and color match or functionally for greater durability and less contracture, may be the more desirable.[8]

An especially disagreeable type of flap is the so-called trapdoor flap (fig. 12A) which heals by a humping up into a raised dumpling-like scar, due to the contracture. This wound is usually a tongue shaped defect of tissue (fig. 12B), avulsed but hanging on one edge so that the flap is viable and can be sewed back down. It is cut at quite a bevel so that the flap is quite thin at its free margin but gets progressively thicker back toward its base. The margins of this sharply beveled edge should be cut back until there is a perpendicular free edge. The opposite margin around its three quarters of a circle should be incised to make a perpendicular shelving edge of the same thickness as the flap and undermined a few millimeters back into good subdermal fat. Closure should be made in the dermis with fine nonabsorbable suture material and pressure applied for a considerably greater length of time than for an ordinary scar. Such a humped scar is relatively unimportant on the abdomen, back or upper parts of the extremities, but is disfiguring on the face or neck. Meticulously careful closure cannot be overemphasized but such a scar may result in spite of all efforts. The revision of the trapdoor flap scar requires excision to the mounded margin, undermining mostly on the outside, or into the normal surrounding tissue, and meticulous subcuticular suturing of fresh perpendicular wound margins.

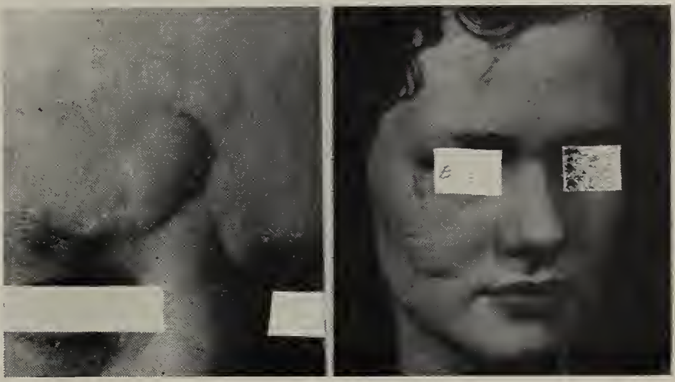

Fig. 12A. Trapdoor flap at two months with edema in flap. B. trapdoor flap of cheek at four months with deep depressed scar.

Band scars or contractural bands occur mostly where wounds heal across flexion creases perpendicular to the lines of skin tension. These scars must be excised. If the defect is great, it should be better to cover it with skin grafts, the thicker the better, holding the parts out in full extension. Multiple darts made by small incisions perpendicular to the wound margins produce a broken up healing line with an accordion-like effect which allows motion to take place without constant tension in one direction. Sometimes, if thin and discreet, the band can be excised and local tissues shifted by z-plasty.[9] The triangular flaps are interdigitated, breaking up the straight line of contracture in the form of a "z" and the length of the wound is optimally increased by 50 per cent. Gentle handling of tissues is particularly important, especially out near the points of the triangles where the blood supply may not be quite adequate.

For a surface defect of face or hands where a functional or cosmetic result is important, excision of the scar with the addition of suitable skin is often indicated. The incisional lines are made parallel to the lines of skin tension and the skin graft is sutured in meticulously, being careful about hemostasis and putting the part at rest with a pressure dressing often stented for five to seven days before doing the first dressing. On the skin the finest suture material for the best cosmetic result should be used. The best donor skin for color match for the face is postauricular or supraclavicular, especially to cover the forehead, nose or cheeks. Such full thickness skin grafts will give the best results providing the recipient site has a suitable avascular bed. If there is doubt of a "take." a thinner graft as a split graft is better.

Defects from scarring about the face, wherein the surrounding tissues are mobile, can be overcome by excision of the scar, undermining and advancement of flaps from the margins. By doing this in stages, a rather tremendous defect may be corrected by transferring tissues from some distance, as up from the neck or the sides of the cheeks, to cover defects higher up, usually toward the midline. Every effort must be made to handle tissues carefully and to produce a minimum of necrosis.

Traumatic tattoos are best prevented by meticulous early wound cleansing and careful diligent removal of all foreign bodies. When already established the surface over the foreign body can be abraided so that the foreign body is extruded, but the discolored scarred skin often must be excised and closed by whatever manner is indicated.

The scars from chronic infection or acne have been difficult to remove but can be considerably bettered by the abrasive method of treatment.[10] Ordinary sandpaper or a mechanically motor driven emery wheel is sufficient to knock off and level the hills down to the valleys. If the full thickness of the skin is destroyed by this technic, healing may be followed by cicatrization with further scarring and contracture. Sometimes the deeper pits have to be locally excised and sutured with this treatment. This is not a simple procedure. It can be done under local anesthesia but requires meticulous attention to details and asepsis. The abraded wound is dressed with a vaseline gauze, almost dry, pressure type dressing as one would treat a burned surface by the pressure method. The gauze is cut away gradually as healing takes place beneath. Considerable improvement in adolescent and younger patients can be achieved but this procedure should never be attempted during an active phase of infection, as a spread of infection destroys further the viable islands of epithelium with subsequent scarring.

Scars or grafts are often red or unsightly early but after the period of resolution, become whiter and more contracted. Scars that begin as thin lines but are against the lines of skin tension spread, get redder and thicker and stay so, longer than those that are in the lines of skin tension that tend to become narrower as time goes on. Skin grafts that do not match well in color with the surrounding tissues may be worse than the original lesion. There is no control over the pigmentation nor lack thereof in the skin graft. Patients must always be warned about this possibility. It is better to choose, where cosmetic considerations are important, skin that is known to match the color of the face and to use thick skin that will not tend to pigment or contract so much. A woman can camouflage this color change by foundation creams and cosmetic powders. A man is more loathe to do this. The plans for reconstruction should be based partly on this factor.

Scar epithelium is unstable epithelium. Healing of burns by procrastination, that is, prolonged healing of granulation tissue with contracture from the sides, is to be totally condemned. Scar epithelium, where the normal rete pegs are not present to hold it down, can be easily knocked off. Such slick, shiny, red, scar surfaces not only are unsightly but they are unstable and do not stand well the wear and tear of life. It is particularly important to have good, viable, durable scars over the exposed parts of the body, such as over the palms of the hands or soles of the feet or the shins. For appearance sake, scars of the face drawn tightly like a mask without good expression and with distortion of features should not be allowed to exist. They can be excised and replaced with better skin in more normal position of features, for better mobility for expression and better appearance.

CONCLUSION

Since the surface healing of the body is important from the functional and cosmetic standpoint and since it is the visible handiwork of the surgeon, it is important that he, the surgeon, acquaint himself with the fundamentals of wound healing and pay particular meticulous attention to detail to attain the best possible function and cosmetic results. Special care for special types of injuries should be kept in mind with the thought of the type of healing that will ensue. Consideration should be given as to the time of secondary repair.

University of Kansas Medical Center.

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Treatment of Myalgia of the Head

ROBERT E. RYAN, M.D., *St. Louis*

Myalgia of the head is a condition frequently seen by the physician, especially during the seasons of the year when there is frequent and sudden temperature change. Actually, myalgia of the head should come under the field of intrinsic allergy.

This condition is one in which the musculature of the head is involved. Myalgia of the head may be divided into two types,[1] the first existing in the postural muscles which insert into the cranial bones, and the second in the muscles which have their origin in the skull bones.

When the muscles are involved in a myalgic process, there is a resulting tenderness within that circumscribed region. It is this region which is the seat of pain during an actual attack.

As mentioned, myalgia of the head is a form of intrinsic (physical) allergy. It is found in individuals who are extremely sensitive to any form of temperature change. This may be in the form of air conditioning, fans, drafts, atmosphoric pressure changes, humidity change, or any sudden change from hot to cold or cold to hot.

It has been shown that the pain which is experienced in an attack of myalgia of the head is the same type of pain experienced when a muscle is forced to exercise when placed under ischemic conditions.[2, 3, 4]

Smithwick has brought forth the fact that an abnormality may be present in the vasomotor nervous system of patients afflicted with a physical allergy condition.[5]

The pain attacks of myalgia of the head have a gradual onset and gradually increase in severity until they reach a peak. Then the pain will gradually subside. This pain is usually within a circumscribed area, but it often is referred to some secondary distant area. However, the original circumscribed painful area is tender and sensitive to pressure, whereas, if the pain is referred to other areas, these areas do not have this tenderness factor.

Increased tenseness of the postural muscles can precipitate an attack of pain of this type. It also may follow some form of acute infection.

In some of these cases of myalgia of the head, secondary neurologic conditions may be experienced. These tend to make themselves pronounced and evident over points where the branches of the cranial nerves perforate the skull.

In these attacks of myalgia of the head, one muscle or a group of muscles may be involved.

In treating myalgia of the head, it is well to remember that this condition is based upon the disturbance of a spasmodic contractive nature of the arterial end of the affected capillaries. To bring relief from the painful phase of the attack, these capillary structures should be opened and dilated. This is usually accomplished by using a vasodilator such as nicotinic acid or Roniacol.

In addition to this vasodilatory type of treatment, I have been using experimentally a new electrical instrument called a Medcolator. This machine helps in myalgia of the head in many cases because it plays the part of a muscle stimulator. The stimulation produced by this electrical apparatus proves to be an effective means for increasing the blood flow through the musculature. This is brought about by the Medcolator causing muscular contraction and this contraction produces a vasodilating effect which in turn increases the blood flow volume.

This form of treatment for myalgia of the head is only a supplement, however, and it must be remembered that vasodilator drugs are of primary importance. The use of the vasodilator type of drug might fit under the heading of prophylactic treatment for it is used with the hope of preventing future attacks. However, this new instrument, the Medcolator, is used to help bring about relief from an acute attack. It is a form of physical therapy. Before using the Medcolator for this purpose, the application of wet heat packs followed by gentle massage was used. Wet heat and gentle massage help these patients but, in my own personal observation, I believe that the Medcolator produces quicker and more pronounced relief.

This instrument provides a pulse output of variable repetition rate. The pulses occur during alternate 1/120 second period. The maximum pulse rate with the switch in the high position corresponds to approximately 700 cycles per second; however only 180 pulses occur during any one second because of the rest period between groups of pulses. The corresponding maximum frequency with this switch in the low position is 400 cycles per second with 120 pulses occurring each second due to the rest period.

The tetanizing current of the Medcolator seems to be the one of choice in dealing with cases of myalgia of the head. This provides a constant tetanic contraction of the musculature to which it is applied. The frequency waves of this tetanizing current are approximately 1000 to 2000 cycles per second superimposed on a ½ rectified 60 cycle sine wave which are not interrupted.

In treating cases of myalgia of the head symptomatically with the Medcolator, it was found that ten of forty patients received complete relief.

This represents 25 per cent of the patients studied. Of these same forty patients, there were twenty-two who received partial relief. This represents 55 per cent of the patients who were studied. Therefore, 80 per cent of the patients, or thirty-two out of the forty in this report received either complete or partial relief from the pain. These results are seen in table 1.

TABLE 1
RELIEF OF SYMPTOMS

No. of Cases	*Complete Relief*	*Partial Relief*	*No Relief*
40	10 (25%)	22 (55%)	8 (20%)

Most of these patients seemed to tolerate the tetanizing current with the volume set about four or four and one-half when the muscles involved are in the back of the head or the back of the neck. If the painful areas are anterior to this, the volume will have to be considerably smaller. This is applied for periods of from five to ten minutes.

These patients should then be instructed to apply wet heat and gentle massage to the involved area or areas later on at home.

As mentioned before, these patients should all be placed immediately on vasodilatory therapy also in an effort to prevent future attacks. The drug of choice in this respect is nicotinic acid. However, some also obtain quite satisfactory results with Roniacol. It should be emphatically pointed out that the amide of nicotinic acid does not produce the desired vasodilatation which is needed in treating these patients and it therefore, will not give these patients the desired relief from these attacks. It is therefore of primary importance that the preparation used is nicotinic acid and not nicotinamide.

Initially, these patients should receive the nicotinic acid in the injectable form. When the desired results have been obtained and these patients have been free from the pain of their attacks for several weeks, they may be changed to the oral route of administration. When this occurs, the dosage of the oral form should be twice as large as the amount of nicotinic acid which had been used parenterally. The oral form of administration of nicotinic acid is naturally not as effective or as efficient as the parenteral form and, in some cases, the patient may not obtain as much relief. In some isolated cases it may be necessary to return the patient to the parenteral route of administration.

If the oral route of administration does prove to be effective, as it will in the majority of cases, the patient should continue to take the medication in this form for about six months or so. If he has no further attacks in that length of time, it is usually quite safe to take the patient off of the vasodilatory preparation completely.

Nicotinic acid may produce some side effects, but these are usually not of a serious nature and are of rather short duration. The most frequently found side effect when using nicotinic acid is a flushing of the skin. This is most frequently in the face, neck and the head, but it may be all over the trunk of the body and the extremities. This flushing is due to the vasodilatation of the superficial skin vessels and it will usually persist for only about fifteen to twenty minutes, and then it will gradually fade out. During the time that the patient is experiencing this flushing, he will feel hot and at times the skin may feel rather "itchy." Some of these patients may experience this frequently, whereas, others may never have it. Usually, however, these patients will experience this only irregularly. Because of this, it is rather important that the patient be warned that this side effect may or may not occur, but its occurrence does not have any bearing upon the successful outcome of the treatment of their painful attacks.

If used properly, the vasodilatory therapy plus the physical therapy measures of the Medcolator and the wet heat and massage will bring about both relief from future attacks and symptomatic relief from the acute attacks. And, after all, this is what the patient actually desires. He wants his head pain problem to be attacked both prophylactically and symptomatically and, if these measures are used, he will find what he seeks.

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A Long Look

Surgery is merely a branch of medicine. Operation is only one of many alternative forms of treatment and, as it must of necessity involve some risk, discomfort, and temporary incapacity, it can be recommended only when no other form of treatment is available, when other treatments are more lengthy, more unpleasant, or more unsatisfactory, when other treatments are likely to fail, or when they have failed. Peptic ulceration is not necessarily a fatal or even a progressive disease; therefore, medical treatment must come first. I use the term "medical treatment" in its broadest sense, for the most important part of it is social and economic. I could cure all duodenal ulcers in their early stages without operation were I allowed to change the man's job and shoot his wife. . . . —Sir Heneage Ogilvie, Editorial, *Surgery*.

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Postgraduate Review

Adrenal Cortex Hormones

Influence on Water Balance and Electrolyte Metabolism

CYRIL M. MACBRYDE, M.D., *St. Louis*

IN ADRENOCORTICAL deficiency, sodium and chloride and water are lost through the urine. Total extracellular (intravascular and interstitial) fluid volume falls, serum sodium concentration falls, serum potassium rises.

Renal salt loss as a cause of low plasma sodium concentration in patients with Addison's disease and in adrenalectomized animals was first recognized by Loeb (1933) and Harrop (1936) and their coworkers. These workers also demonstrated the salutary effects of sodium chloride on the symptoms and signs of adrenal cortex deficiency.

EXTENT OF SALT AND WATER LOSS

Inadequacy of renal tubular absorption of salt is probably the most clear-cut renal dysfunction in adrenocortical deficiency. This defect of salt reabsorption is apparently a primary evidence of adrenal hormone lack. The available data suggest that the adrenal steroids act upon the distal segment of the renal tubule. The degree of impairment of sodium-retaining capacity is small, although the total functional significance is great. Approximately 90 per cent of the sodium, all of the glucose and most of the other valuable constituents of the glomerular filtrate are absorbed in the proximal segment of the renal tubule. As these osmotically active constituents are removed from the tubular fluid, an osmotic force develops which returns water to the blood stream. Therefore, approximately 90 per cent of the water also is reabsorbed in the proximal segment of the tubule as a secondary result of the absorption of solutes. Only 12.5 per cent (according to Homer Smith) of the filtered solutes and water enter the distal tubule. Normally, practically all of this final 10 or 12 per cent is absorbed in the distal tubule. Normally only 0.3 to 0.5 per cent of the filtered salt and water are excreted in the urine. In complete adrenocortical deficiency four times as much, or about 2 per cent, is lost. In degree or percentage this sounds small, but when one realizes that in a normal man the total glomerular filtrate amounts to about 180 liters per twenty-four hours, one can calculate that the water loss may amount to 2.7 (2 to 3 liters) per twenty-four hours. The sodium chloride passing into the glomerular filtrate normally amounts to from 1.0 to 1.5 kilograms per twenty-four hours. The loss of NaCl in adrenocortical deficiency may amount to 22.5 gms. (in this calculation). Normally the loss is 5 to 6 gm. of NaCl in urine, balance being maintained by daily intake of approximately the same amount.

A man weighing 70 kg. has approximately 15 per cent of his body weight as interstitial fluid (or about 10.5 liters) and 5 per cent as plasma (3.5 liters). About one third to one half of the extracellular fluid must be removed to produce the clinical picture of dehydration. In complete adrenocortical deficiency the sodium and chloride lost and the volume of the extracellular fluid lost may reach the one third figure in twenty-four hours or less.

In these considerations it is important to point out that clinically it is possible to control mild Addison's disease in some cases simply by adding salt to the diet. The normal salt intake in and on food is from 5 to 8 grams daily. The Addisonian patient usually likes salt, so one may sometimes raise the salt intake in and on food to 12 or 15 grams per day, and one may give enteric-coated sodium chloride tablets and thus add perhaps another 3 to 6 gm. daily. Such amounts of salt total about 20 gm., and could make up approximately the 22.5 gm. of NaCl the complete Addisonian might lose. However, excess oral NaCl is apt to cause nausea, vomiting or diarrhea, so it is easy to defeat one's purpose. Treatment with adrenal cortex extract or desoxycorticosterone promptly restores the ability of the distal tubule to normally absorb NaCl and water.

One must note that the water loss so far considered is entirely due to and associated with loss of sodium chloride.

SITE OF ACTION OF ADC IN RENAL TUBULE

In the absence of adrenal cortex hormones (ADC) neither potassium ions nor hydrogen ions are properly concentrated in the urine—thus potassium excretion diminishes and hydrogen ion excretion diminishes. Likewise, ammonia formation decreases. With the excretion of hydrogen ions diminished, and NH_3 formation decreased, the urine is more alkaline and acids are retained, thus acidosis tends to occur.

The capacity of the kidney to put out ammonia and titratable acid into the urine is restored by giving desoxycorticosterone or adrenal cortex extracts. The capacity to put out potassium is likewise restored.

One is obliged to deduce that the effects of the

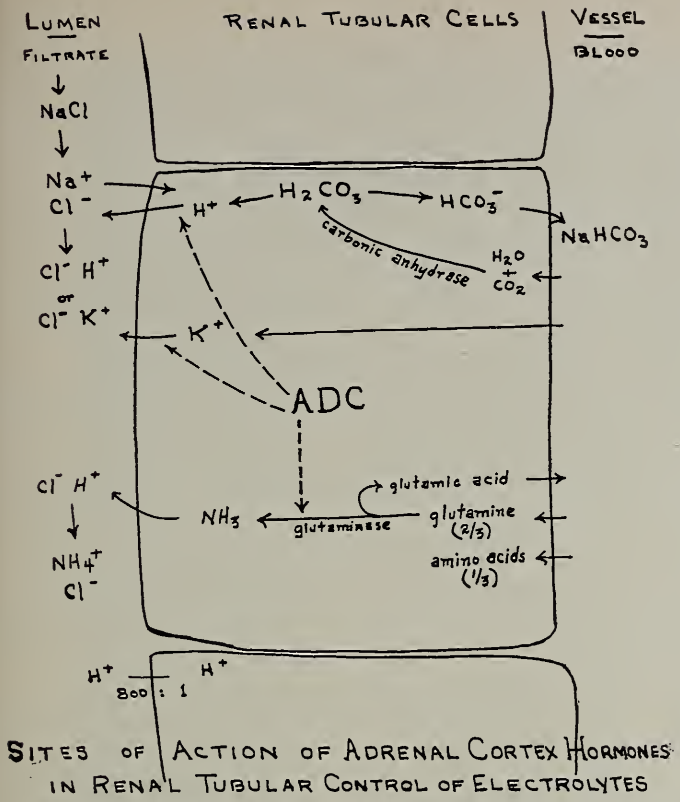

Fig. 1. The diagram shows the processes involved in acid-base regulation as they are believed to operate in the distal renal tubular cells. The primary event is the exchange of H ions dissociated from carbonic acid within the tubular cell for base ions in the tubular urine. Base is thus conserved for return to body fluids (Na plus HCO_3 equals $NaHCO_3$, etc.)

Note that the diffusion of ammonia into the urine is important to neutralize the H ions. Some free H ions may be excreted in the urine, but the capacity of the tubular cells to produce free acid in this way is limited to a concentration gradient of H ions of 800 to 1. NH_3 ions (two thirds from glutamine, one third from amino acids) reduce the concentration of free H ions, thus reducing the gradient and facilitating flow of H ions into the urine.

The probable sites of action of adrenal cortex hormones (ADC) are shown, indicating their importance in the tubular mechanisms involved in the exchange of hydrogen ions, potassium ions and ammonia ions for sodium ions.

adrenal cortex hormones upon inorganic and organic metabolism are not separate and distinct processes, but are intimately associated one with another and that in the absence of these hormones, the kidney expresses the deficit in the only way a kidney can, by a reduction in the processes that involve the greatest expenditure of energy, that is, in the separation of ions.

When one surveys all of the deficiencies of a patient with Addison's disease or of an adrenalectomized animal, there appears to be a common denominator—the inability of various organs to supply energy at an adequate rate for their function. This is true in working muscle and may also be the reason for the inability of the liver to form glycogen from non-carbohydrate sources. When adrenal cortex hormone is supplied, the liver can break down proteins and form glycogen from them; the kidney can excrete hydrogen ions, potassium ions and NH3 and absorb Na.

Adrenocortical steroids affect not only the kidney cells but also other cells and through such influences affect electrolyte and fluid metabolism. The lack of adrenal hormones leads to decrease in sodium and water in the extracellular compartments. In the interstitial fluid the sodium concentration falls and, because of the decreased sodium concentration, water tends to go into the cells. Potassium tends to come out of the cells into the interstitial fluid. The serum K rises for two reasons: (1) decreased K excretion; (2) migration of K from cells.

Adrenal steroids decrease Na in sweat and saliva. In adrenocortical deficiency, salt loss in sweat may be high.

Cortisone is only one twentieth to one thirtieth as effective as desoxycorticosterone in influencing Na, Cl, water and other electrolytes. Cortisone affects primarily protein (nitrogen) metabolism and fat and carbohydrate metabolism, but has relatively little effect upon electrolytes and water.

ADRENOCORTICAL HORMONE OVERDOSAGE EFFECTS

Excessive therapy with desoxycorticosterone (Doca) in Addison's disease may cause hypertension, edema, angina and heart failure, with K deficit resulting in necrosis of heart muscle.[7] One must, therefore, give adequate K in diet, not low K, to all patients getting Doca therapy. Before Doca was available low K diets were used.

Results of excessive therapy with cortisone: negative N, Ca and P balance; sometimes, but less often: excess blood volume, Na retention, edema, weight gain, low serum K.

Such untoward effects may be counteracted with: Na-absorbing resins; diuretics; low salt, adequate K diet.

Usually when one is treating arthritis, allergies, or collagen disease over long periods of time, doses of 25 to 50 mg. daily of cortisone do not cause salt and water retention. Large doses of 100 mg. or more daily over a period of some weeks may cause it.

RENAL FAILURE IN ADRENOCORTICAL DEFICIENCY

Whenever dehydration is severe for any reason —diabetic acidosis, Addisonian crisis, hemorrhage, burns—plasma volume may be greatly reduced and the rate of plasma flow through the kidney may fall to such a point that renal function may be seriously impaired. Extreme fluid loss, of course, affects all tissues, but because of the large plasma flow necessary to maintain the vital functions of the kidney (about 180 liters per twenty-four hours), evidences of kidney failure become quickly apparent. Thus, in severe adrenocortical deficiency, renal failure may occur with retention of waste products resulting in uremia. Retention of urea, sulfate and phosphate occurs. Such renal dysfunction is not a primary evidence of adrenal cortex lack, but a secondary effect due to a drop in glomerular perfusion pressure and a secondary decrease in the filtration rate. If one maintains plasma volume and filtration rate such substances are normally excreted even when adrenocortical hormones are completely absent.

ADRENAL CORTEX: PITRESSIN ANTAGONISM

The adrenal cortex may play an important role in the primary regulation of water balance apart from its effect on electrolytes. The adrenalectomized animal or a patient with Addison's disease is unable to initiate the normal diuresis usually observed following excessive water ingestion. Water intoxication is easily induced under such conditions. An increased amount of antidiuretic principal has been found in the urine of the adrenalectomized animal. The osmotic pressure of the lost electrolytes overcomes the antidiuretic effect in part, but under conditions of forced hydration the effects of the antidiuretic factor are best noted.

On the other hand, the administration of cortical hormones will produce a diabetes insipidus-like state not responsive to the antidiuretic factor.

In adrenal insufficiency there is a decreased diuretic response to water due to: first, a decreased renal plasma flow and glomerular filtration rate; second, an increased tubular reabsorption of water, which is the most important factor in this regard. In the adrenal insufficient state, the antidiuretic pituitary hormone seems to be present in excess.

In the absence of cortical hormones there is also an increased sensitivity to pitressin. Cortical hormones and pitressin when given simultaneously act antagonistically.

It has been demonstrated that the liver tissue removed from cirrhotic patients, like the livers from adrenalectomized animals, will inactivate pitressin less effectively than the livers of normal subjects. Patients with liver disease are more sensitive to pitressin, and exhibit after pitressin injections more marked water retention than normals and a tendency to decrease in serum sodium concentration. In such patients who retain excessive water under pitressin treatment, injection of cortical extract will bring about diuresis and increased salt retention.

A patient with Addison's disease apparently has more antidiuretic factor present in his blood, and, in addition, he is more sensitive to this pituitary antidiuretic factor. He, therefore, cannot normally diurese after being given a sudden large water intake. This is the basis of the Kepler water test used in clinical diagnosis of Addison's disease. Desoxycorticosterone cannot improve the ability of the kidney to handle this water load, but cortisone is capable of restoring the patient to normal in this respect. Thus, in this instance, cortisone has a diuretic effect, whereas one usually thinks of it as causing water retention.

CONCLUSIONS

Adrenal cortex hormones may be either antidiuretic or diuretic, depending upon the physiologic circumstances. An easy way to remember these at first confusing and apparently contradictory sets of facts is to postulate that when adrenal cortex extract, or cortisone, is given to an adrenalectomized animal, or to a patient with Addison's disease, the effect of the hormones is to restore the subject toward normal. If excess water is present in the patient's body the cortisone is diuretic in effect. More often dehydration is present in adrenocortical deficiency, and the cortisone acts to limit salt loss and water excretion, and it is in this instance antidiuretic in effect. This is replacement therapy, and restores the organism toward normal.

When an arthritic patient, or other person with no adrenal insufficiency, is given cortisone in large amounts and over a considerable period of time, the results are different from those seen in adrenocortical insufficiency. In such circumstances excessive and unphysiologic amounts of cortisone may be present in the patient's body over considerable periods of time, resulting in excessive sodium retention, excessive water retention and excessive potassium excretion.

From the clinical standpoint, in relation to the practical uses of the adrenocortical steroids now available, these thoughts must be kept in mind:

1. In adrenocortical insufficiency, desoxycorticosterone is the most potent hormone affecting the salt and water metabolism. Cortisone and hydrocortisone are the more important hormones in restoring the other physiologic abnormalities of the patient with Addison's disease or of the adrenalectomized animal.
2. When cortisone or hydrocortisone are used in the treatment of the many non-adrenal conditions in which they seem to be of value, particular attention must be paid to electrolyte metabolism to prevent excessive sodium and water retention, excessive strain on the cardiovascular system, excessive potassium excretion with all of the possible serious effects of potassium deficiency, especially upon the diaphragm and upon skeletal and cardiac muscle. Excessive dosage with these cortical steroids may produce breakdown of body tissues, with loss of nitrogen, calcium and phosphorus, and this catabolic type of action of these hormones may contribute to the potassium loss. A breakdown of glycogen, with glycosuria, may be accompanied by further exaggeration of potassium excretion.

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Others Say

Forewarned Is Forearmed

. . . Attraction to educational activities of organized medicine has been lessened by assumption of many of those functions by special groups. While that mitigates against attendance it does not lessen the importance of organized medicine in formulating policy. Every physician should be informed upon questions at hand. Lone wolf tactics, or the practice of ignoring questions believed impractical or unimportant, can lead only to blunder and calamity. Furthermore, there are issues that require deliberation upon more than local and regional level. One of the significant (recent) occurrences was the integration and cooperation between delegates from the St. Louis County and the St. Louis Medical Societies.—A. N. Arneson, M.D., *Bulletin, St. Louis Medical Society.*

Prophylaxis for Patients

. . . The necessity for choosing a physician implies that some doctors are not competent. This is true. . . . Since you want a family doctor . . . find out if any . . . are members of the American Academy of General Practice. This organization requires at least 50 hours of continuing medical study every year . . . the only national medical organization with such a . . . requirement. This at least assures you to some degree that its members continue to apply themselves to bettering their diagnostic and treatment skills.—Glen R. Shepherd, M.D., "Doctor's Notebook," *Kansas City Star.*

Resistive to Change

New methods are not born into the medical profession without pain. . . . The fee-for-service doctor looks upon the group-plan centers with the same emotions that the corner-grocery merchant must have felt when he saw the first supermarket.—Lester Velie, "Supermarket Medicine," *Saturday Evening Post.*

Shouldn't Be Necessary

. . . Great sums of money and, even greater of energy, have been expended to "sell" American Medicine to its consumer. To an excessive number of our leaders "P.R." seems of more consequence than "℞."

. . . It now seems high time to divert at least some of this effort to improving our medical relations. No million-dollar-a-year agency would be required to polish up our personal pride in our profession, to manifest more sympathy and consideration to our colleagues, nor to develop a more appreciative and less critical perspective in our medical relations. . . . Especially is this true of the chance comment and the lightly dropped remark reflecting adversely on the ability or integrity of a fellow practitioner. These indulgences have a nasty way of coming home to roost in the form of personal enmities, the degradation of a shared profession, malpractice litigation, or, at best, of appearing more human than humane.—J. H. Trolinger, M.D., *Cape Girardeau Medical Journal.*

Spend With Caution

. . . It costs an awful lot to be sick these days, and though the fee to the physician is a relatively small part of the total bill, we are in some ways responsible for the rest. No physician should deny his patient everything needed but he should also think in terms of dollars here and dollars there that might be saved. . . .—G. Wilse Robinson, Jr., M.D., Editorial, *Jackson County Medical Bulletin.*

The Reason

"I accepted the professorship and chairmanship of the Department of Pathology because of the tremendous potentialities of the Medical School of the University of Missouri. This conclusion is based upon an uninterrupted series of precedents—precedents which enable one to predict that any project sponsored by the Sovereign State of Missouri has the brightest possible future. As a consequence, I have no doubt that the new hospital and the new school are destined to be a giant of progress, a model to be imitated, and a hallmark of the finest in medical practice. The citizens of Missouri are building a lasting monument to Science and Service."—Joseph E. Flynn, M.D., Professor of Pathology, M.U. School of Medicine.

They're Still People

Tolerance makes for better understanding. Therefore, tolerate the questions that your patient will bring up. Do not belittle them regardless of how silly or inconsequential they may appear. Give the patient an infusion of understanding. For instance, if it is a gall bladder that has to be removed, tell him that the gall bladder positively does not manufacture the bile; and on the same premise, he should be informed that a gall bladder operation is a serious one. Patients appreciate honesty. They can cope with any situation regardless of how serious it is so long as they know exactly what it is. Don't be afraid to hold the patient's hand if she is a woman. This gives her fatherly reassurance. Try to put yourself in the patient's spot and see what problems you would have. Above all, be kind and understanding, and have a heart.—S. W. Scorse, M.D., Editorial, *Tri-State Medical Bulletin.*

Case Reports

Hyperpotassemia

Severe Incidence in a Case of Diabetic Acidosis Electrocardiographic Findings

MICHAEL BERNREITER, M.D., *Kansas City*

HYPERPOTASSEMIA IS most commonly observed in patients with anuria since, under normal conditions, the kidneys will prevent abnormal accumulation of potassium. However, in severe diabetic acidosis, before therapy, the serum potassium level is elevated in most of the patients. The case presented illustrates the usefulness of the electrocardiogram as a diagnostic aid and therapeutic guide.

CASE REPORT

B. C., a 56 year old male, was admitted to St. Mary's Hospital at 3:00 a.m., October 21, in coma. History obtained from relatives disclosed that the patient had been diabetic for four years. This condition was fairly well controlled with diet and 40 units of insulin daily. Three days prior to hospitalization he discontinued insulin and, on the evening preceding admission, the patient became stuporous and lapsed into coma.

Physical examination on the morning of admission revealed the patient to be in a comatose condition, responding slightly to painful stimuli. The eyeballs were soft, the pupils reacted to light and the corneal reflexes were absent. The tongue and skin were dry and a definite odor of acetone was on the breath. The pulse rate was 120 per minute, and regular. Respiration was labored and of the Kussmaul type. The blood pressure was 90/70. Heart and lungs were normal to percussion and auscultation. No reflexes could be obtained. Catheterized urine specimen was strongly positive for sugar and acetone. The immediate diagnosis was diabetes mellitus with acidosis and coma.

Treatment was begun immediately and consisted of 25 units of regular insulin administered intravenously in 1,000 cc. of 10 per cent travert containing 0.3 per cent potassium chloride. Soon after this solution was started patient's respiration became extremely labored and the blood pressure fell to 50 systolic and 40 diastolic, the pulse could not be obtained and death seemed eminent. An electrocardiogram taken at this time showed typical changes of severe potassium intoxication (fig. 1). The blood sugar obtained on admission was reported as 660 mg. per 100 cc. and the CO_2 combining power was 20 volume per cent. Infusion of potassium chloride was discontinued at once and specific treatment in the next four hours consisted of intravenous administration of regular insulin (50 units), 1,000 cc. of 5 per cent glucose in normal saline solution and 1,000 cc. of 1/6 molar lactate. At the end of this period the patient was conscious, able to take fluids by mouth and a repeat electrocardiogram showed almost complete reversal to normal (fig. 2). The patient's course was uneventful and when he left the hospital the diabetes was well controlled.

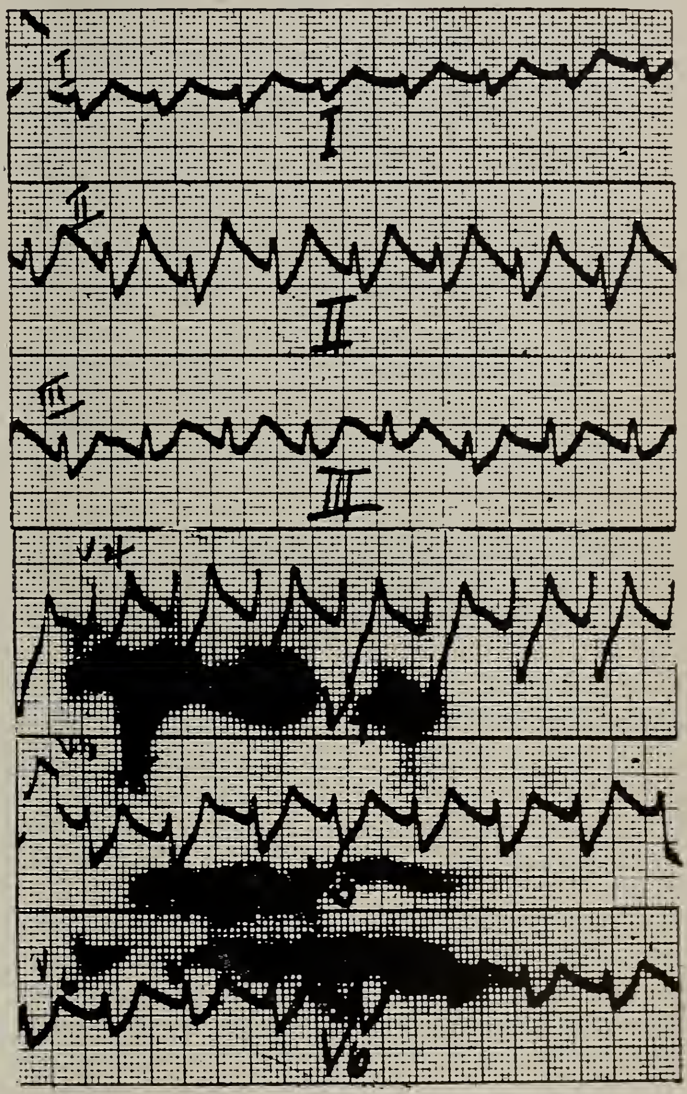

Fig. 1. Marked evidence of potassium intoxication. No P waves are identified. Auricular standstill. The R waves are decreased in height and the depth of the S waves is increased. The amplitude of the T waves is equal or higher than the amplitude of the QRS complexes. The S-T segments are markedly depressed and form a straight line with the upstroke of the T waves. The QRS interval is prolonged (intraventricular block).

COMMENT

Diabetic acidosis predisposes to potassium intoxication.[1] Lowered sodium content which is nearly always present in marked acidosis enhances the effect of hyperkalemia and augments the electrocardiographic findings. The concentrations of other ions influences the toxicity of potassium and

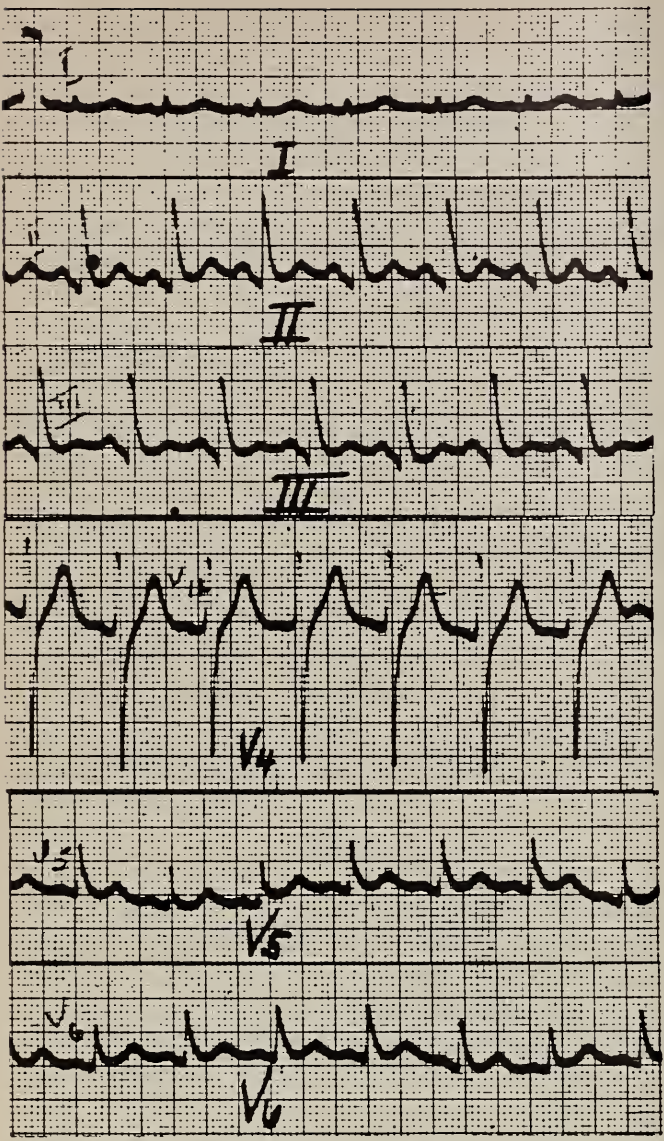

Fig. 2. This electrocardiogram was taken approximately four hours after figure 1. The findings are now essentially within normal limits.

therefore the serum potassium level itself does not necessarily give a true picture of the clinical state of the patient. The serum sodium level may be practically normal during diabetic coma but, in view of the severe dehydration, these normal concentrations do not necessarily indicate a normal state of the electrolytes in the extracellular space. A therapeutic regime, therefore, based exclusively on the blood chemistry findings may be quite erroneous and detrimental to the patient. The electrocardiogram, however, reflects accurately the reaction of the heart muscle to the ionic environment. "The electrocardiogram is not properly a substitute for the measurement of the concentration of serum potassium,"[2] but it is a much more reliable clinical index.

The usual sequence of the electrocardiographic changes in potassium intoxication may be outlined as follows:

1. The development of tall, narrow, pointed T waves (fig. 3B).
2. AV block, decreased amplitude of P waves and eventually auricular standstill (fig. 3C).
3. Depression of ST segment, which tends to become a straight line to the apex of the T wave (fig. 3D).
4. Progressively increasing grade of intraventricular block with decreasing R waves and increasing S waves (fig. 3E).
5. Ventricular arrhythmias and development of a smooth diphasic QRS complex (fig. 3F).
6. Ventricular standstill.

The correct and immediate treatment is of the utmost importance since rapidly fatal potassium intoxication may occur, the greatest potential danger in intravenous injection of potassium salts. Calcium therapy has perhaps little effect, but sodium chloride infusion may be of marked benefit when sodium depletion has played an important role in aggravating the clinical status of hyperpotassemia.[3] Glucose and insulin administration is perhaps the most valuable form of therapy in hyperkalemia. It has been recognized for some time that glucose and insulin infusion decreased the extracellular potassium level,[4] and hypokalemia may follow the treatment of diabetic coma with large doses of insulin. Electrocardiographic signs of potassium intoxication may quickly disappear after the intravenous injection of insulin or glucose solution.

When this patient was first seen the possibility of potassium deficiency was considered and slow intravenous infusion of a weak potassium solution was started as an emergency measure. The result was almost disastrous. In the meantime an electrocardiographic tracing (fig. 1) was obtained which gave conclusive evidence of severe potassium intoxication. When the electrocardiogram, like the one in this case, exhibits auricular standstill and a greatly widened QRS complex, the end is usually not far off and heroic measures are necessary to correct the situation. The importance

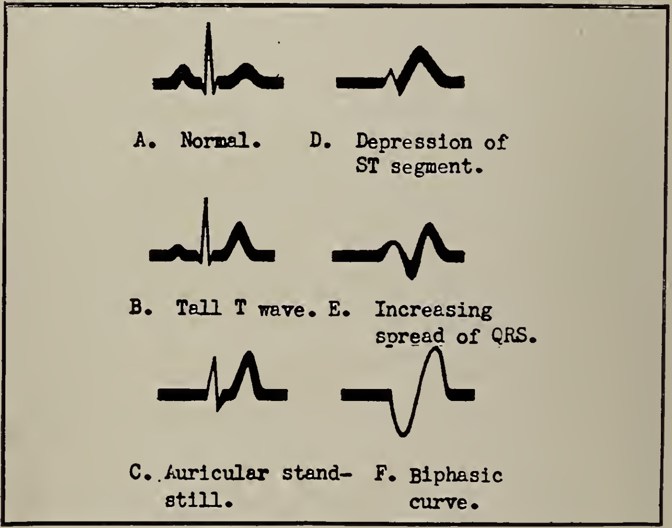

Fig. 3. Electrocardiograph changes in hyperpotassemia. After Finch et al.[3]

of the electrocardiogram as a diagnostic aid and therapeutic guide was well illustrated in this emergency. The recognition of hyperpotassemia as well as hypopotassemia will play an important part in decreasing the mortality rate in diabetic acidosis. Potassium ions are extremely toxic when administered to a patient with hyperkalemia. The effect consists of a gradual increase of the duration of diastole until the heart comes to rest in a completely relaxed state.[5]

SUMMARY

1. Potassium intoxication may be a fatal complication of diabetic acidosis and administration of potassium in such patients must be avoided.

2. A typical, easily recognized electrocardiographic pattern may be the first definite sign of acute hyperpotassemia.

3. The electrocardiogram is more useful in determining the total effect of the ionic environment upon the cardiac muscle than the determination of the serum concentration of the individual electrolytes.

4. The most effective treatment of potassium intoxication is the administration of glucose and insulin. Prompt treatment is necessary to prevent cardiac arrest.

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Irritable Colon

A Personal Experience

LELAND B. ALFORD, M.D., *St. Louis*

I AM WRITING this note concerning a personal experience with irritable colon, hoping it may contain suggestions that will prove directly or indirectly helpful to others suffering from that baffling and distressing disorder. It is to be understood that I am a stranger in this field of medicine and have no idea how generally applicable my experience may be. Certainly my plan of treatment will have to be adapted or rejected for the individual case, depending on circumstances. The plan, evolved with the aid of several able and interested specialists in gastroenterology, has rescued me from a miserable condition, and for a year has afforded me quite a satisfactory state of comfort and so may contain a hint of value in other cases, particularly the more severe types among which my case seems to have belonged.

My symptoms came on in 1950 without much forewarning and before long became constantly distressing with rather severe general and abdominal reactions. As a resort to textbooks, special articles and other sources in the medical literature was not rewarding, I began, with the aid of consultants, a series of experiments on myself with medication and diet. The end result was this plan that became standardized and was consistently effective.

The most helpful medicament was found to be methium (Chilcott), which although designed for high blood pressure seemed really to exert a sedative effect on the uncontrolled peristalsis. Its great advantage was that it could be used indefinitely without losing its effect. Still, codeine or paregoric, certainly the most effective remedies, could not be entirely dispensed with but with methium available as a supplement their use could be maintained at a point at which they did not lose their effectiveness, necessitating ever increasing dosage and causing undesirable complications.

One observation that seemed to be valid and was revealing was that a bowel movement set in motion a cycle of hyperperistalsis which gradually built up to cause cramps and another evacuation. By administering the stronger preparation at this moment the cycle was largely halted in the milder stages and thereafter the less effective remedies sufficed to control the situation. A distinct further contribution was that of reducing bowel movements to once in thirty-six or forty-eight hours, a circumstance which both minimized the need for the stronger medicine and provided a longer period of rest for the harassed colon. Finally the idea was hit upon of stopping all medication after twenty-four hours following a bowel movement, thus allowing peristalsis thereafter to build up naturally to another movement. This release from medication avoided stasis and the resort to enemas and laxatives, both undesirable.

This scheme is rather involved and may prove difficult to adapt to the individual patient but it is formalized and long range and avoids continual trial and error expedients for special crises. In outline it is therefore as follows:

1. Upon a bowel movement, immediately codeine or paregoric in suitable dosage.
2. In two or three hours methium 125 mg. to be repeated every three or four hours for twenty-four hours, four or five doses.
3. At the end of twenty-four hours following the movement discontinue all medication until another evacuation occurs.

Methium, although used in much larger amounts in high blood pressure, is somewhat cumulative and must be watched with some caution. It should not be used to control diarrhea, for which codeine or paregoric is necessary. Tricoloid (Burrows-Wellcome) is a quick acting soon passing preparation that is useful for cramps and with meals to lessen their stimulating effect on peristalsis. In the early stages of treatment and during diarrhea later on an effective soothing substance is resion (National Drug) in amounts of one or two tablespoonfuls three or four times a day.

DIET

I am adding a diet list of suspect articles for the reason that the regulation of diet is extremely difficult. The judgment of the lay patient is rarely to be trusted and, still, diet is so important. No doubt there will be variations in responses among subjects. The objectives in dieting are (1) to reduce residue and (2) to eliminate irritating substances.

Undesirable or suspect foods (the most irritating articles in italics) follow:

Pork and pork products.

Salad articles, rough substances, brans.

Excess of fats (vegetable oils and fats to be preferred).

Vegetables, best strained as for infants (except possibly for beets and carrots).

Sugar.

Fruits and *fruit juices.*

Milk, ice cream, cheese (except cottage cheese).

The bean and corn family.

Melons and berries.

Tomatoes and *tomato juice.*

Honey and *molasses.*

Spices and condiments, especially *pepper, mustard* and *horseradish.*

Coffee, *alcohol,* tobacco (unless cigarettes with filters).

Vitamin pills.

Laxatives.

This list merits some comment due to the complicated nature of the subject. Some surprises are evident as, for instance, in the irritating effects of sugar and the fruits. But there are qualifications. Bananas, pears and even pineapple juice are less irritating than others and may be tried out, if not used regularly. Cream, if not milk, may be taken rather freely. Sugar may be added to cakes. Any of the articles may be tried in small amounts, at intervals or later on in the treatment when a certain colonic tolerance has been achieved. But a warning is that diet can never be neglected.

A difficulty in this list is the absence of fresh substances. One compensation is the use of fresh carrot juice which can be extracted with an electric appliance now on the market. Meals should be frequent rather than large. As colonic tolerance is attained the amount and range of the diet can be increased and caloric requirements fulfilled.

One precaution is timely because the irritable colon is so sensitive to spoiled foods. Refrigeration should be adequate and care should be taken in restaurants, trains and planes.

SUMMARY

From a personal experience with fortunate results a plan of medication and a diet list of suspect foods are offered as suggestions to be considered in similar cases of irritable colon.

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Special Articles

A Patient Speaks His Mind

DANIEL A. LORD, S.J., *St. Louis*

PERHAPS THAT TITLE sounds formidable. When someone threatens to speak his mind, he usually is about to fire both barrels, not caring too much who's hit. Can you load two barrels with bouquets? Is praise and gratitude a form of ammunition? For speaking my mind is not in any sense a blast; I just happen to be grateful to doctors, grateful for a lifetime. And since I have been invited to use the pages of your JOURNAL, I am taking this unusual chance to say "Thank you very much indeed."

As a priest I have suffered the usual temptation to play amateur physician, to give advice for the body as well as for the soul; in my own praise may I loudly assert that I have resisted the temptation? I long ago decided that I had no more right to give advice along medical lines than a physician might have to set himself up as a spiritual and religious guide. Yet out of my lifelong experience with illness and doctors, and out of that desire we all feel to give advice, any kind of advice, I have found the temptation a severe one, and one I deserve credit for resisting. You see, I have really a contempt for amateur doctors as deep as my respect for professional physicians. And my respect and admiration for the medical profession is very high indeed.

Like all small boys who happen to fall into the gentle hands of doctors, I was early determined to be a doctor myself. It was a fascinating choice in those days between the stage, the surgery and the fire engine house. Who would have guessed that the sanctuary would in the end claim what talents God had given me? Yet it remains a tribute to doctors that, like those other small boys, I thought my physician was one of the world's greatest men and could not imagine anything in life more wonderful than to carry his little black bag, listen wisely to the oracles of a stethescope and relieve small boys of their pains and bruises.

You see, I stem from the days of small black bags and home visits. (I have a highly unprofessional conviction that some doctor is going to rediscover home visits and make himself more than comfortably rich; how many a family will welcome the arrival of the doctor at the domestic door rather than reaching them down the hospital corridor! A mere side note, to be read and passed over rapidly.)

Anyhow, I was delivered on a pleasant summer evening in a little cottage on Chicago's West Side in the days before hospital deliveries had made it impossible for a man to have his own individual birthplace. What would we have done historically, if future presidents had all been born in Ward B, Fifth Floor Front, instead of in their log cabins? The doctor was a typical family physician of the period, who himself begat a large family of children, several of whom passed from being early basketball stars to being notable physicians in their own right.

I came into the midst of a medical controversy long since, I believe, dead: He was an allopath and my Mother forsook him when she found it too tough persuading the children to take his type of medicine, to supplant him with a homeopath, whose medicine was little sugar pills covered with tasteless syrup. Deep down I always suspected medicine that didn't make you gag. I had early, however, heard rumbles of the controversy, and all it meant to me was horrible tasting medicine versus medicine that was like candy. I preferred the homeopath to whom our family turned; but I was sure his methods were too mild ever to be effective.

All that came a little later, for it was an allopath who pulled me through a youthful, almost infantile attack of diphtheria. I lived, but brought with me on our migration to Chicago's South Side a throat which went through its yearly bout of tonsilitis and croup and whooping until I was sixteen. My mother, who had a mind of her own and told even the family physician what he could or could not do to her children, did not believe in operations. For that matter, she was convinced in the folklore of the period, that the only excuse for hospitals was to provide a less civilized place to die. So I think she swung to homeopathy because their doctors operated less often. The dear old, white haired, fatherly doctor who watched me through all the youthful ailments (and I had them all) did suggest removing my tonsils. My mother spoke her interdict. And at sixteen, just to prove her right, all throat trouble stopped, and I have had the ironcoated, copper lined throat of a public speaker, and retained my tonsils to the current hour.

It was the fatherly homeopath who vaccinated me, and I can still hear the rumbles of the contemporary fight on the subjects of vaccines; as I recall with deep and not too intelligent pathos the fact that his own young doctor son, destined to succeed him, died either because he took vaccines or did not take vaccines or was given the wrong ones . . . how hazily the hot subjects of the hour float through to a child! I just know that the fine old doctor suddenly became a bent, broken man, who came to the house without his wonderful young doctor son, and no hope of a successor stepping into his practice.

How young would I have been when I was circumcised? I've no idea; yet the memory is vivid . . . the two kitchen chairs that were placed as I watched them, so that their tops became the support for an ironing board. I recall walking in a long flannel nightgown and being lifted by our faithful doctor and placed upon the board, now draped with sheets. The first strong whiff of ether still lingers as a clear memory. And the "catcher's mask" of a basket guard that covered the wound. I must have been an infant; I remember only graciously gentle hands and our parlor which became my first experience with an operating room.

Into the family apartment building moved the young allopath fresh from Rush Medical and an interneship at the Michael Reese, where he had met and married a charming young nurse. He was just establishing practice, so he had plenty of time to play catch with me in our back yard, introduce me to his abundant and highly eclectic library (physicians in those days had time to read and the medical journals were not so numerous or demanding) and to become our family physician.

At thirteen for my first conscious time, I knew that I owed my life to medicine . . . and my mother. What struck me down, I still do not know; but between Sunday morning and Sunday afternoon, my temperature had risen from normal to 104. It was the days of that emperor of surgery, Dr. J. B. Murphy, and my griping abdominal pains suggested surgery and a ruptured appendix. Our young physician never left me; and through my haze of fever, I know I looked up into the faces of the fine doctors he had brought in for consultation. Surgery was announced, and I was to go at once to Mercy Hospital. But my mother's dread of surgery got in the way; she begged and at their challenge took the risk, and pleaded for just that one night to keep me and "work on me." I don't know if doctors in these days would be as malleable; I only know her will prevailed. Our young physician remained on the horizon, the learned elders withdrew; and throughout the night she fed me in tablespoonfuls a quart of pure olive oil. You may turn your head away at the thought and the immediate consequences. When the ambulance came in the morning, I was pronounced too weak to be carried from our apartment to the waiting vehicle. But the doctor and my mother joined forces, and I think prayer entered in . . . for, surely this is no surprise, I lived.

Contact with doctors was reestablished at Florissant, when we young Jesuits went for a picnic, drank contaminated water, and broke out in an epidemic of fourteen typhoids. Again through a mist, I see the doctor who came up from the village, looked us over, determined on starvation, turned us over to our Brother Infirmarian, Brother Saeger, and returned at intervals to watch our progress and see us all live. The modern physician who has seen typhoid almost disappear as a disease would probably blanch at the treatment that won us back our health: A daily diet of the white of one egg, a small glass of orange juice topping castor oil, daily cold baths (we walked the long length of corridor to the tubs), no food, and ice packs when our fevers raged. But we lived.

An interval, during which I came for the first time into contact with modern hospitals. The typhoid lingered on in the form of a fistula, and the final decision was operative treatment. Coming from the age that dreaded hospitals and feared operations, I went to St. John's in St. Louis and submitted myself to a young surgeon with grave apprehensions. I became at that moment and have remained ever since the most devout client of hospitals and the most profound admirer of surgical skill. It was like entering a new world, a new world of ideas, and skills, and technics, and sanitation . . . all the wonders that make up the curative power of medicine as it is today.

Then one year before my priesthood, the cough that would not disappear and the weariness I could not shake off were tested and x-rayed . . . and I was pronounced tubercular, with spots on the lungs and all the positive tests. How can a patient be grateful enough for the health he has known in life, after a sentence that was unmistakable? A nurse of the period told me years later that they decided quietly it was another young seminarian who would never reach the altar. But another doctor took me in hand, gave me courage—along with shots which were and still are mysterious to me, prescribed a course of outdoor living, of diet and sleep . . . and in three months' time I was back at my studies, to be ordained and launched in due course into a career which, whatever else it may or may not have been, has been strenuous.

Once more I might have died. Once more, a doctor saw to it that I did not.

It may seem, as I find myself cataloguing my ills, that I have been a chronic invalid. The fact is exactly the opposite. I remember a priest friend saying to me after I had returned from a trip that had brought me to twenty-five cities in thirty days for a series of close to 130 talks, "You certainly have abounding health." And so I have actually felt about myself. Is it one of the tricks of modern medicine and one of the skills of the modern physician that both are unobtrusive? That they work almost without the patient's noticing it?

I know that I was back in St. John's for a double hernia, handled with infallible skill. I know that one day, some ten years ago, as I walked rapidly down the street, I found myself suddenly totally blind. A doctor saw me into my hospital bed, and found that almost nothing was working right. Five months later, I was back at my full work, with more energy and zest for living than ever. I might, in less wonderful days, have ended right then and there as the chronic invalid; not when a great physician had me carefully in hand and was calling on modern medicine to rebuild the functions which somehow had been dissipated.

Just the other day, I shook hands with my surgeon and my physicians and left St. John's after one of my four times a year cystos and check-ups. Ever since January of 1954, I have known that I have cancer of the lungs. For something like six previous years, I have had cancer of the bladder. And though I have spent time in the hospital (time that was not wasted, for I have picked up on sleep, done the reading I could not otherwise do, and spent peaceful hours over a writing pad or a typewriter), none of my regular pursuits or interests have been even interrupted.

I shook their hands with gratitude and marvelled a little at the calm, matter-of-fact way in which we moderns accept the wonders of modern medicine, the immense beneficence of modern hospitals, and the skill and curative power of the modern doctor. In any other age, I should have been dead years ago.

I should probably have died in infantile diphtheria. I would certainly have died at thirteen. Typhoid could have taken me off at twenty-four. At thirty-one, tuberculosis would have snapped the thread. I would early have been a crippled old man with hernia. How about those three rushed trips to the hospital, sudden and unexplained fevers, which doctors seemed to wave away with a casual gesture? The complete break at fifty and more, what would have come out of that in a less blessed period of medical history? And the cancer of the bladder which has been held back with gentle skill, how swiftly that would have ended my days two generations ago.

Now I face the verdict of cancer of the lungs with supreme confidence. If God has sent me a warning of death, that is a kindly gesture. I have time to do many of the things I still want to do and that still remain to be done. Yet when I smile into the eyes of my doctors, I have the utmost confidence. Medical science has not yet found the cure for cancer as the scientists have found the cure for most of the diseases that plagued mankind two generations ago; but they can hold it back, and they do.

When the verdict was spoken by my gracious doctors, I had that moment of fright and anxiety. "How long before the end?" I inevitably asked. They were most encouraging. "Must I forego all the things I like to do?" On the contrary, they promised me my normal activities in my regular life. "Are there cures?" They were most willing to try, and they were sure that the course could be held back. Months later, I am still at my work, still seeing my doctors regularly, still going to them with confidence and leaving them with gratitude, happy that I have been born into such an age of wonders.

Sometimes one hears doctors themselves regret that the Age of the Giants is over. You seldom hear mention of an Osler, a Lister, a Murphy today. The reason to a mere layman seems obvious: First of all, in those days, great doctors were rare indeed. Today the profession is filled with great doctors. In those days, individuals stood out working almost alone. They were like Edison and Cyrus Field and Alexander Graham Bell in the world of invention. Today in the world of invention, science produces still greater wonders, but the scientists work in teams, almost anonymous, sharing their day's work, their lifetime of knowledge, the long chain of experiments and the final triumphant results.

That seems to be the case (as a layman sees it) with modern medicine. Today he is in the hands of "teams of doctors," of hospitals and laboratories and combined individuals skills. His health is the product of a wonderful series of collaborations. He lives longer and lives more healthfully, he misses death by constantly wider margins, simply because so many doctors are so good, and so many medical schools are turning out constant replacements, and so many hospitals are a blend of science and human kindliness, and so much is done in laboratory and experimental clinic, to safeguard and rebuild the health of the world.

I speak as a total amateur. I speak as one who has often been a patient. But when I speak my mind it is full of happy medical memories, the faces of gentle and wonderful doctors to whom I owe more than I can ever repay. And when I speak, I speak with a heart full of gratitude, and a prayer to the Divine Physician to bless the doctors who have given me life and the abundant life, length of days, and strength for service.

Rauwolfia Serpentina and Its Alkaloids

THOMAS S. FLEMING, M.D., *Moberly*

The use of these preparations has been generally accepted for the treatment of certain types of hypertension and there has been a great deal of information imparted by various investigators and pharmaceutical houses, so it occurred to me that it would be a good plan to assemble some of this information and endeavor to get some of it into a usable form.

Rauwolfia serpentina, a shrub which grows in the humid submountainous regions of India, has been used for decades by native physicians for its sedative properties. It was employed in the form of the crude root chiefly for the control of emotional disturbances. Only in recent years was it found to be of value in control of certain forms of hypertension.

There are some unanswered questions. Is there a specific action different from that of the barbiturates? Does the whole root have disadvantages over the various alkaloids? Are there certain properties of the whole root which might cause renal irritation, excite certain parts of brain; and have other disadvantages? We must not let our enthusiasm lead us astray. In the past, we have been carried away with alluring advertising and proficient detail men, and I might add by well meaning physicians.

In order to properly prescribe any drug, its physiologic and pharmacologic actions should be well understood. The main action of Rauwolfia serpentina has been fairly well established. It depresses the centers of the autonomic nervous system in the hypothalamus.

To be more specific, in the medulla there is a vasomotor center which is made up of a vasoconstrictor and vasodilator center and these centers are influenced by the hypothalamus. There is some controversy as to just how much these centers have to do with the tone of the peripheral blood vessels. It has been well established that fibers from the vasoconstrictor center do travel down the bundle of Schuetz, through the spinal cord and out the sympathetic nervous system to the peripheral blood vessels and play a great part in vessel tone and control of blood pressure. No actual fibers from the vasodilator center to the peripheral blood vessels have been positively demonstrated. There are many factors which act on this center to affect the blood pressure and now we are led to believe that Rauwolfia retards the impulses from the constrictor center, and, as a result, relaxes the tone of the blood vessel and reduces the blood pressure.

In the use of all hypotensive drugs, the side effects can be anticipated when the physiologic and pharmacologic actions are better understood.

Nausea, for example, often occurs, which is probably a direct action on the vomiting center. Diarrhea, which frequently is encountered, is thought by most authorities to result from a direct toxic action of the drug on the mucosa of the gastrointestinal tract.

There are several explanations for the increased appetite. It could well be secondary to the feeling of well being, but most authorities believe that Rauwolfia preparations have a stimulating effect on the gastric mucosa. These might be classified as stomachics. This factor may explain the gain in weight sometimes associated with administration of these drugs.

If one could theorize that this drug has an antihistaminase action, all side effects would be easily explained, but correspondence with reliable authorities has led me to believe that no such action occurs. The nasal congestion is undoubtedly caused by peripheral vasodilatation. However, in favor of the antihistaminase action, is the fact that often antihistamine drugs give relief from some of these side effects.

The sedative action is most important. It does not require much persuasion to convince one that one major effect in hypertension results from this action. It helps to eliminate impulses from the body, even the cerebral cortex, which go to affect those vasomotor centers and stimulate blood pressure. In other words, it raises the threshold of the centers against abnormal impulses, so that less are referred to the peripheral blood vessels. Because of this particular action, it has been advocated that Rauwolfia is similar to the barbiturates but many believe that Rauwolfia has a more specific action, and that it is not habit forming.

Bradycardia is a frequent symptom and probably results from depression of the cardio-accelerator center in the medulla. At least, there is an imbalance between the cardioinhibitor and accelerator centers, and the sedative action would seem to fit best with a depressing action on the accelerator side. It is not due to vagal hyperactivity since intravenous atropine will not abolish it. It has been postulated that certain alkaloids had a digitalis like action, and, in fact, increase the tone of cardiac muscle and in this way slow the pulse. At any rate, bradycardia is a desirable side action, especially when administered in conjunction with other hypotensive drugs such as Apresoline which sometimes causes an increased heart rate. Often an unpleasant fast pounding heart is found with hypertension and when eliminated gives the patient great relief.

Headache is a common complication. This is most likely caused by reduction of blood pressure, especially if the reduction is too rapid. Again, it might be caused by direct action of the drug on certain centers. Then, one might raise the question in this regard again of an antihistaminase action. At least, the cause of the headache should be kept in mind and differentiated from other causes.

The miosis is no doubt a result of a direct action on the parasympathetic nervous system to the eye. It has been well established that Rauwolfia has no adrenergic nor cholinergic action and not likely any action on the receptors in the muscles of the peripheral blood vessels, but this is one instance where it acts directly on the parasympathetic side.

Listed below are some of the preparations used:

Whole Root:

a. Raudixin (Squibb) 50 mg., 100 mg. and 250 mg. tablets.

Extracts:

a. Rauwiloid (Riker) 2 mg.
b. Rauwolfia Serpentina (Sharp and Dohme) 5 mg.
c. Rautensin (Smith-Dorsey) 2 mg.

Pure Alkaloids:

a. Serpasil (Ciba) 0.1 mg. and 0.25 mg.
b. Resperin (Squibb) 0.05 mg.
c. Reserpine (Lilly) 0.2 mg.
d. Serpiloid (Riker) 0.2 mg.
e. Resperpoid (Upjohn) 0.1 mg. and 0.25 mg.

The indications for the use of the various Rauwolfia preparations has been fairly well established. The most important factor is the proper classification of the type of hypertension, especially as to the cause; and, is the drug actually indicated? There are certain types of so called essential hypertension where simple measures such as reduction of weight and correction of various habits will correct the blood pressure and symptoms. But when these measures do not suffice, Rauwolfia is indicated. Also, many authorities are using it as an adjunct to the other hypotensive drugs with good results and have found that it helps materially to reduce the dosage of the other drugs.

It is not too difficult to establish the proper dosage. The dosage must be increased in order to get results. The side effects, as mentioned before, will give proper warning in regard to toxicity. For example, such complaints as sedation, nasal stuffiness, diarrhea, give sufficient warning that at least enough has been administered. It should be remembered, however, that these side effects are not serious and may pass as the patient becomes tolerant to the proper dosage.

In this regard, it is well known that it takes about three weeks or longer before full effect of the drug is attained and it takes a similar length of time for the drug to be completely eliminated.

At the present time it is suggested that the various alkaloids be administered in dosage, using one alkaloid or extract tablet comparable to one tablet of the whole root.

Unless the case is urgent, one should start with small doses. For example, 50 mg. of the whole root or one tablet of one of the alkaloids or extracts is given after the evening meal daily. This dose is increased by one tablet at the end of each week and increased until desired effects are obtained. This amount may reach up to 100 to 600 milligrams of the whole root or two to six tablets of the alkaloid or extract. When pressure and symptoms have been controlled, gradually reduce the dose at weekly intervals, when, as a rule, one of the tablets after the evening meal will maintain the proper blood pressure.

There has been no effort to add any information to the use of this drug than that already presented by capable men. It was an effort to get most of the pertinent information at hand. The recent developments in the therapeutics of hypertension have been most encouraging so it behooves all of us to handle such drugs in a satisfactory manner in order that they will not be classified as "no good" and the patient gets the best results—and I might add, gets no serious side effects.

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A Medical School Graduation Address Never Delivered

Last June, several thousand young medics received their diplomas after listening to graduation exercise addresses. These usually vary from the long-winded to the short-and-sweet, and from the boresome recitation of *cliches* to the succinct and stimulating. Such excerpts as we have read from the current crop ran the gamut of the afore-mentioned.

We wonder sometimes why these orators do not tell these kids the whole truth. It's true, a young physician should have the ideals and precepts of honesty, integrity, scientific zeal, and all the other utopic, hippocratic attributes held up before him in glowing, even baroque, fashion. We would not for one minute deny these esteemed gentlemen this oratorical or histrionic type of presentation, when called upon to make graduation addresses—it is their big moment, and it should be an equally big moment for enforced listeners.

And yet, there is such a paucity in these speeches of a few cardinal facts of life for young physicians. Why doesn't some great man, in addressing a medical school graduating class, tell them the one or two words which mean more to patients, literally, than all the factors which the orators emphasize, reemphasize and overemphasize?

Every patient wants an honest doctor, although it sometimes takes months or years for a community to find a physician is dishonest. Every patient wants a practitioner of impeccable integrity, yet, a reputation of integrity may be blasted suddently in a community after years spent in building it. Every patient wants a thorough, scientific zealot for a personal physician, and is offended many times with "brush-off, production-line" methods. Yet these points in a graduation address could quite well be handled with mimeographed handouts.

But, of what possible benefit to the patient are these attributes, even to a superlative degree, if the patient can't obtain a physician at all, or, when needed? All the scientific skill, all the honesty, all the integrity, all the everything, hallowed and sublimated by the graduation orator, are as nothing to the patient as the two qualities, *dependability and availability.*

These are the two qualities, little-advertised, little exploited by the orators, but of these is the secret essence of a completely successful practice; these kids should be told!

VINCENT T. WILLIAMS, M.D.

Confidence

Recently, by invitation, a group from our Medical Society visited the home plant of one of the ethical pharmaceutical houses in a nearby state. We traveled by train and, upon arrival, were allotted air-conditioned rooms in one of the city's leading hotels. A banquet that evening with all the trimmings was followed by a visit to the theater. Early the next morning, after a delicious breakfast, we were taken on a tour of acre upon acre of buildings.

We saw the shipping department where finished products were leaving for destinations throughout the world. We visited the receiving department and saw huge tanks, crates and barrels of chemicals from various manufacturers of crude materials. Fascinating were the capsule-making machines with their various colored products, the ampoule washing, sterilization and filling machines. We visited the printing office where labels and periodicals are produced. The laundry department stressed the "why" of the immaculate cleanliness of the whole plant. The afternoon session was devoted largely to observation of the production of glandular products of which insulin was probably foremost.

The next morning and afternoon were given over to visiting the buildings devoted to research in chemistry, antibiotics and cancer. The department of experimental medicine connected with one of the larger hospitals reminded us of our physiology classes in medical school when we labored over smoked drums. In all, we figured it was two days well spent when we boarded our train to return home.

After a delightful evening meal in the diner, we returned to our seats for complete relaxation. It was then that the significance of the trip presented itself.

Here was a company, one of many, with tremendous overhead in experimental medicine and research, with honest clean products looking to the future. How downright unfair it would be for a druggist to substitute for a specified product of this or any other reputable house a cheap supposedly similar drug. It would not only be unfair but unethical and illegal. It would also be destructive of confidence, and when you destroy confidence in medicine you destroy the fundamental foundation upon which it is built.

Martyn Schattyn, M.D.

Early Signs

In previous editorials we have occasionally called attention to what Board Certification is doing to medicine—namely, piling up such a training that those with certification will never go to a small city or town to practice, even though opportunities there might be exceptionally good.

This bunching of our well-trained men plays right into the hands of the cults. Then, too, there is some doubt that so long a training without some private practice is the best form of training.

But now a new and alarming development is taking place. Apparently so prolonged a training—four years of college, four years of medicine and at least five years of hospital training—is beginning to discourage men who heretofore have desired to study medicine. Certainly, a young man contemplating such a program could not finance by working his way any more than the first four years—leaving at least the last nine years to some form of independent income such as family income or loan. The plan once put into effect feeds on itself—because those who follow want to be "as well trained as those before." The plan feeds on itself until it breaks down.

As already mentioned, the prospect of a minimal thirteen years training is beginning to prove discouraging. Until this last year a preponderance of our best ranking college students preferred medical careers. This is no longer true. The number of high ranking college students preferring today to study medicine has hit a decline, the preference now being for engineering.

Our indifference to public relations and trends probably means that nothing will be done until there is a debacle.

F. T. H'Doubler, M.D.

A Urological Curiosity

Recently, we treated a 5 year old white boy who appeared to be normal and whose physical examination was negative, except for an irregular, hard, nodular swelling, a mass firmly adherent to the deeper structures of the dorsum of the penis. There was no involvement of the urethra; there were no palpably enlarged inguinal nodes, and the mass was not tender. The x-ray and other laboratory findings were all normal.

The lesion was excised, appeared to be well-encapsulated, and grossly was composed of interlacing bundles of pearly-white fibrous tissue, dense in consistency. Microsections, including Van Gieson stains, proved it to be a fibroma. This child is cured, and has had no recurrence in the fourteen months since surgery.

We were surprised in searching the literature for reports of benign penile tumors, at the scarcity of such material. Papillomata, condylomata and venereal warts are the most commonly occurring benign penile tumors. Next in frequency are cysts, myomas, lipomas and vascular tumors. Any growth commonly found associated with skin or connective tissue may be found on the penis. A mixed tumor was reported by Barney and Gall (J. Urol., 1938).

The earliest reported case of a fibrous penile tumor we encountered was that of Marcus Beck (Trans. Path. Soc., London, 1873). Darier-Ferrand presented a case history of a "recidivating progressive dermato-fibroma," in 1951.

Anyone interested in excellent classifications of all penile tumors should consult Carson (J. Urol., 1940), and Wattenberg (J. Urol., 1944).

Because of the unusual occurrence of this tumor, we feel that the differential diagnosis must consider this rare lesion whenever any practitioner is confronted with a penile tumor or mass.

Robert B. Bristow, M.D.

Fraternally Yours

"Ethics Is Nothing Else Than Reverence for Life"

Recently, we were privileged to read two documents about physicians which set us to wondering, wondering about how much religion is in the makeup of the average physician, or the exemplary, outstanding physician?

The first of these is a brief brochure on Dr. Albert Schweitzer, M.D., and we beg our readers to read these following four paragraphs:

> " 'Ethics is nothing else than reverence for life. Reverence for life affords me my fundamental principle of morality, namely, that good consists in maintaining and assisting and enhancing life, and to destroy, to harm or hinder life is evil. Affirmation of the world, that is to say, affirmation of the will-to-live which appears in phenomenal form all around me, is only possible for me in that I give myself out for other life.' (Albert Schweitzer)
>
> "In his jungle hospital near the town of Lambarene, just south of the equator in Equatorial French Africa, Albert Schweitzer, who began life himself as a sickly child, has spent most of his career, from the age of 38 on, feeding, housing, clothing and curing sick natives—'to pay back the greatest debt of Western civilization.' Since his arrival there, when he was forced to perform his surgical operations in a dilapidated henhouse, Doctor Schweitzer, by his own efforts, has cleared back the jungle and built hospital structures until there are now facilities for 250 ambulatory patients, 250 hospital patients, and a leper colony of 350.
>
> "Specialists in several fields of learning have long known Albert Schweitzer as a great fellow specialist. Musicians know him as the greatest living organist, world authority on Bach, and as the author of a revolutionary book on the interpretation of the music of Bach.
>
> "Theologians know him as a master theologian whose books on Christ and St. Paul rocked the foundation of erudite Christian scholarship. Philosophers know him as a weighty writer in the metaphysical tradition of Kant, he is now working on a third volume which will conclude his life's work on his philosophy: 'The Decay and the Restoration of Civilization' and 'Civilization and Ethics.' Admirers call him 'The Greatest Man Living.' Americans call him 'Number One Man in the World,' the British call him 'The Man of the Century,' in France he is known as *'Le Plus Grand Francais Vivant,'* in Germany he is considered 'the Most Remarkable Man of the Age,' in Italy he is 'The Greatest Genius since Leonardo da Vinci,' to the Dutch he is 'The Great Men's Great Man,' in Equatorial French Africa they call him 'The Famous Unknown,' and throughout the jungles along the Congo they refer to him as 'The Near Saint.'
>
> "But to most ordinary people, his intellectual achievements are overshadowed by the dramatic story of his life. They have heard about him as the Alsatian pastor's son who became an ordained minister, a great organist and philosopher and then, at the age of 30, renounced his careers to study tropical medicine and care for the downtrodden natives of Equatorial French Africa. They have read about his St. Francis-like solicitude for all living things—how he avoids treading upon ants and beetles that cross his path. To Albert Schweitzer, a man who is so remote and unaware of worldly things, the world has bestowed the highest honors. He has been awarded numerous honorary degrees from the world's foremost universities. As world authority on Goethe he received the Goethe Prize from the city of Frankfurt. Lately, the German Medical Association awarded him the Paracelsus Medal. Last year, he received the Nobel Prize for Peace—truly a fitting honor for a man who has given himself so unstintingly to promote peace and for the betterment of all living things. It is with this Nobel Prize money that this year—his 80th—Doctor Albert Schweitzer is beginning the enlargement of his leper colony in Lambarene so that he may continue to maintain, assist and enhance life."

After reading this document, there is little anyone can say. Certainly, Dr. Schweitzer is a Christ-like man, and a contribution to the Albert Schweitzer Hospital Fund, 34 East 51st Street, New York, sent in with a meek, bowed-head is about the best we can suggest.

"A Surgeon's Last Words"

The other document which stimulated our wonderment was a small pamphlet, published by the Moody Press, of 820 North LaSalle Street, Chicago. This little booklet described the religious feelings, sentiments and life of Dr. Nelse F. Ockerblad, M.D., who was, for many years, Professor of Urology, at the Kansas University School of Medicine, and widely known as a urologist in the greater Kansas City area.

The text of this booklet is too long to reprint, but the simple, strong faith of Nelse is reflected in every page. He delineates his own evolution from his childhood acceptance of Christ, the mature resolution of all religious doubts, and closes with this beautiful paragraph:

"Now, throughout a long life I have found that fellowship with Christ is most sweet and satisfying. It is not only wonderful to live by, but it is also *still more* wonderful to die by, as I am now finding out."

V. T. W.

An Effective Fungicide

. . . P-594, designated chemically as 2-nitro-2-bromo-1-methoxy-1-phenylpropane, is effective in treating lesions involving the glabrous skin particularly if caused by *Trichophyton rubrum.* A 2 per cent ointment is found to be slightly irritating to some patients with acute lesions, but 1 per cent P-594 in a vanishing cream base is effective, non-irritating, and non-sensitizing.—Wilfred E. Woolridge, M.D., St. Louis, *Journal of Invest. Dermatology,* 1953.

Missouri Medical Meetings

Southern Medical Association, St. Louis, November 8-11, 1954.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Kansas City Southwest Clinical Society Conference, Municipal Auditorium, Kansas City, October 4-7, 1954.

Missouri Academy of General Practice, Governor Hotel, Jefferson City, October 27, 28, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Ninety-five people were registered at the second Annual School Health Education Workshop held at the Central Missouri State College, Warrensburg, July 6, 7, 8, 1954. The entire program was built around the theme of cooperative planning for better health for school age children. How can we get people to work together—particularly on the all-important local level—to plan for and then carry out the plans for better school health?

Attending the workshop were school nurses, public health nurses, local health officers, health educators of voluntary health organizations and official state agencies, superintendents of schools, physical education and health instructors, classroom teachers, representatives of the State Department of Education, the State Dental Association, the State Medical Association and the Central Missouri State College.

The workshop functioned through means of discussion groups where certain school health problems were selected and discussed. Participation of the individuals of the various groups in the group deliberations was uniformly good.

The need for and desirability of having much greater participation of physicians in planning and operating school health programs in local schools was stressed in the final recommendations of each group to the General Conference. In view of these recommendations, and similar ones from many other like workshops, might it not be well for more doctors to interest themselves in what, if anything, is really being done in their schools as to a definite school health program?

A keynote address was delivered to the Conference at its banquet on the evening of the opening day. W. W. Bauer, M.D., Director, Bureau of Health Education, A.M.A., spoke on "The Place of the School Health Council in Cooperative Planning." He stressed the point that it is not necessary to have an elaborate organizational set-up for a school health council in order to do a job. Get together a few people who are directly concerned and interested in school health and let them go from there. His talk was inspirational and was well dotted with illustrations from personal experience and observation of the value and success of group action in solving school health problems.

A number of doctors from the surrounding area attended the banquet and were privileged to hear Dr. Bauer's address.

(Continued on page 778)

Members in the News

At Camarillo, California, where he had gone after giving up his practice in Osceola, Dr. T. H. Douglas, Jr., died in midsummer.

The Benemerente medal bestowed by Pope Pius XII for achievements in civilian life was presented to Kansas City physician, **Michael Bernreiter**, M.D. Archbishop Edwin V. O'Hara, who presented the medal, said "By presenting this medal to Dr. Bernreiter, we acknowledge and honor him for his skill, knowledge, wisdom and service which he has exercised so generously all these years." Three other Kansas City physicians have been awarded the medal previously. They are **M. J. Owens**, M.D., **A. N. Altringer**, M.D., and **Frank L. Feierabend**, M.D.

A new radiologist, **Randal Weed**, M.D., has associated with **J. L. Fisher**, M.D., and **E. S. Reed**, M.D., in St. Joseph.

The new director of the child psychiatry department of the Greater Kansas City Medical Health Foundation is Dr. George Lytton. Dr. Lytton comes to Kansas City from Hastings, Nebraska.

Kansas City physicians **Ralph E. Duncan**, M.D., and **Carroll P. Hungate**, M.D., spoke at a Federal Civil Defense Conference in Denver in midsummer.

New president of the K. C. Breakfast at Eight Club is **Walton C. Ingham**, M.D. **James E. Keeler**, M.D., is vice president of the organization.

The Miami County Hospital in Paola, Kansas, has announced the appointment of Edward H. Stratemeier, M.D., as radiologist.

Frank H. Zahrt, M.D., Princeton, has purchased the Lambert Hospital in that city. Dr. **Marian Lambert**, the founder of the hospital, has joined the resident staff of the University of Kansas Medical Center, where she will do ob-gyn research.

M. B. Perkins, M.D., has opened offices in Mountain View. Formerly Dr. Perkins practiced in Willow Springs.

New physician in Perryville in **James Fairchild**, M.D. He is associated with **L. W. Feltz**, M.D. in that city.

On completion of his internship at St. Louis City Hospital, **Charles E. Michaelis**, M.D., has associated himself with his brother, **B. A. Michaelis**, M.D., in practice in Fredericktown.

The Hickman Mills Clinic has announced the association of **William R. Lentz**, M.D. Dr. Lentz will be associated with **Irving H. Clark**, M.D.

Edwin C. White, M.D., Kansas City, was elected President of the Missouri State Board of Medical Examiners at their July meeting.

Jack M. Davis, M.D., Kansas City, recently taken into custody by the Czechoslovakian Communists, on charges of spying, has been released. Captain Davis is with the U. S. Army Medical Corps and is stationed in Germany.

The Missouri Society of Medical Technologists now has four Honorary Members, with the election of Drs. **Hollis Allen**, St. Louis, and **Russell Kerr**, Kansas City. Previously Drs. **R. O. Muether**, St. Louis, and **Victor Buhler**, Kansas City, had been accorded this honor.

The Scientific Exhibit section of June *Postgraduate Medicine* features a nine page spread on "Cervical Disk Lesions" by **Lee T. Ford**, M.D., and **J. Albert Key**, M.D., St. Louis. The exhibit is a well presented study of the problem amply illustrated and to the point.

The Weld County (Colorado) Medical Society heard a discussion of "The Shoulder-Hand Syndrome" by **C. Stewart Gillmor**, M.D., Kansas City.

K. C. physician **Robert E. Bruner**, M.D., discussed "Cerebral Palsy and Brain Damage in Pediatric Practice" before the Iowa State Medical Society.

Former President Harry S. Truman has agreed to serve as honorary chairman of the K. C. Baptist Memorial Hospital campaign.

Joseph E. Flynn, M.D., associate professor of pathology at Columbia University College of Physicians and Surgeons, has joined the faculty of the Missouri University School of Medicine. Dr. Flynn replaces Dr. **M. Pinson Neal** as chairman of the Department of Pathology.

Retiring president of the Greater Kansas City Foundation for Exceptional Children, **C. G. Leitch**, M.D., was presented a citation for meritorious service.

Joplin physicians voted to rotate services to take care of the city clinic until a new city manager is appointed.

C. B. Schoeberl, M.D., has returned to Joplin and will open an office in the Frisco Building.

Eugene H. Hamilton, M.D., Joplin, has left that city for a year postgraduate study in cardiology at Kansas University Medical Center.

A proposal to levy a special 2 mill tax in North Kansas City for a city hospital was approved by the voters by a margin of nearly 8 to 1.

The Journal of the Kansas Medical Society carries an article on "The Use of Hydrocortisone-Neomycin Ointment in the Treatment of Various Dermatoses" by K. C. physicians **Bruce V. Drowns** and **Donald L. Fuhrman.**

The Daughters of Charity of St. Vincent De Paul honored **Theodore Greiner**, M.D., and **E. P. Buddy**, M.D., at a Testimonial dinner at St. Louis De Paul Hospital.

From Missouri Methodist Hospital, St. Joseph, **Calvin C. Young**, M.D., has begun a residency in radiology at K. C. Research Hospital.

The St. Joseph Clinical Society voted to merge the functions of the clinical organization with the Buchanan County Medical Society.

After two years in the Army, **Stanley G. Legner**, M.D., has returned to Perryville where he is associated with **J. J. Bredall**, M.D.

Internist **Richard R. Cohle**, M.D., has opened offices in Carthage. Dr. Cohle received his graduate training at St. Louis County Hospital and the V.A. Hospital in St. Louis.

A native of Anderson, **Jack Roark**, M.D., has begun practice in Noel.

The Lions Club of Monroe City has announced that **Charles R. Johnson**, M.D., is locating in that city on completion of his internship at City Hospital, St. Louis.

Over a thousand persons attended a testimonial celebration in honor of **W. E. Kitchell**, M.D. The St. Clair physician was honored on the completion of fifty years of medical practice.

Browning physician, **Howard Carter**, M.D., has moved to Hamilton where he will practice.

After residency in surgery at K. C. Research Hospital, **Jackson C. Moody**, M.D., has begun practice in Clinton.

M. C. Johnson, M.D., Richmond, has announced his association at the Richmond Clinic with **F. A. Crozier**, M.D.

The new 48 bed wing for the Boone County Hospital was dedicated in mid-summer. The addition, which will almost double the hospital capacity, was stimulated by a $100,000 gift from Dr. and Mrs. **Frank G. Nifong**.

Frank X. Hartigan, M.D., St. Joseph, is recovering from a skull fracture suffered in a fall at his home.

K. C. Research Hospital has announced the appointment of Robert E. Adams as administrator. He has served as assistant administrator for five years.

The Missouri State Medical Secretaries and Assistants society met at Fayette in midsummer. Included among speakers at the meeting were **W. J. Shaw**, M.D., **Roscoe L. Pullen**, M.D., and **W. A. Bloom**, M.D.

After completing his internship at St. Joseph's Hospital, St. Joseph, **Martin H. Christ**, M.D., has associated himself with **H. C. Senne**, M.D., in that city.

St. Joseph physician, **John S. Kirk**, M.D., has left to do research at Lawrence, Kansas.

Terry E. Lilly, Jr., M.D., spoke in Sao Paulo, Brazil, on "The Industrial Surgeon's Role in Cancer Control."

The Three D's (Doctors-Dentists-Druggists) Picnic at Nigro Brookside Farm, K. C., was well attended by members of all three professions. At the meeting **John O. Skinner**, M.D., Kansas City, was awarded a citation for "long outstanding community service."

The Medical Library of the Thompson-Brumm-Knepper Clinic has been notified of the approval of the library as an institutional member of the Medical Library Association.

The Challenge of the A.M.E.F.

JAMES P. MURPHY, M.D., *St. Louis*

Chairman, MSMA Committee for the American Medical Education Foundation

Our 79 American medical schools are in a financial squeeze that requires an additional $10,000,000 annually to overcome.

This pressing economic problem of our schools is endangering our nation's high standards of medical education. It has made it necessary for some of the schools to reduce teaching staffs to dangerous levels. It is increasingly raising the possibility of governmental intervention in our independent system of medical education—a system that has helped produce medical progress at a rate unmatched in history.

The American Medical Education Foundation—the medical profession's arm of the National Fund for Medical Education—offers a challenge to every doctor. It's challenge to take part in a major national program to help keep our schools solvent and free. If you have not given to A.M.E.F. this year or if you have not made a contribution directly to your alma mater this year, I hope you will fill out the pledge card at the bottom of this page and mail it as soon as possible to your MSMA Committee for the A.M.E.F. The participation of every Missouri doctor in this program is needed.

One of the most important points about giving through A.M.E.F. bears repeating. It is simply this: Every dollar given to A.M.E.F. by physicians encourages the support of the businessmen and corporations who are urged to contribute to medical education through The National Fund for Medical Education. We need their help very much, and they should have clear signs that the medical profession is doing its level best to set a good pace.

Remember these points about contributing to A.M.E.F.: Your contribution to A.M.E.F. is deductible from your Federal income tax. Your entire contribution may be earmarked for your own alma mater. If you so designate your gift, every cent of it will go directly to your school. Undesignated gifts are used generally for the 79 medical schools. None of the money you give is used for administrative or fund raising expenses. (The A.M.A. pays all administrative expenses.) It all goes to help our schools.

The challenge of the A.M.E.F. program must be met. Let's make it a record year for the medical profession of Missouri in helping to meet it.

To Keep Our Medical Schools Solvent and Free

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MSMA Committee for the A.M.E.F.
623 Missouri Theatre Building
634 N. Grand Avenue
St. Louis 3, Mo.

1. I wish to contribute $................ to the A.M.E.F. and further wish to designate this amount to .... University.
2. I wish to pledge $........... annually to the Foundation and further wish to designate this amount to .... University.
3. Please bill me for the amount of my pledge. ☐

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IN MEMORIAM

Duemler, Thomas B., M.D., Seneca, a graduate of Beaumont Hospital Medical College, 1900; member of the Newton County Medical Society; aged 83; died May 20.

Wurzer, Arnold Henry, M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1928; member of the St. Louis County Medical Society; aged 55; died May 21.

Schulz, Gustav B., M.D., Cape Girardeau, a graduate of Beaumont Hospital Medical College, 1892; honor member of the Cape Girardeau County Medical Society; aged 80; died June 8.

Cofer, James C., M.D., Kennett, a graduate of the University of Tennessee School of Medicine, 1930; member of the Dunklin County Medical Society; aged 53; died June 13.

Anderson, W. Connelly, M.D., Kansas City, a graduate of the University Medical College of Kansas City, 1907; honor member of the Jackson County Medical Society; aged 80; died June 15.

Lee, Elbert J., Jr., M.D., St. Louis, a graduate of Barnes Medical College, 1898; honor member of the St. Louis Medical Society; aged 82; died June 20.

Paul, Thomas M., M.D., St. Joseph, a graduate of the University of Pennsylvania School of Medicine, Philadelphia, 1899; honor member of the Buchanan County Medical Society; aged 77; died June 29.

Sharp, Cecil A. Z., M.D., Clayton, a graduate of the University of Geneva, 1933; member of the St. Louis County Medical Society; aged 46; died June 29.

Bond, Franco G., M.D., Flat River, a graduate of Ensworth Medical College, 1912; member of the Mineral Area County Medical Society; aged 67; died June 30.

Monroe, A. E., M.D., Kansas City, a graduate of Marion-Sims College of Medicine, 1893; honor member of the Pettis County Medical Society; aged 84; died June 30.

Thompson, William G., M.D., Holden, a graduate of Missouri Medical College, 1889; honor member of the Johnson County Medical Society; aged 83; died July 2.

Hyatt, William T., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1921; member of the Chariton-Macon-Marion-Randolph County Medical Society; aged 61; died July 5.

Byrns, Robert E., M.D., St. Louis, a graduate of Barnes Medical College, 1911; member of St. Louis Medical Society; aged 68; died July 5.

Goldman, Max, M.D., Kansas City, a graduate of Kansas City Medical College, 1901; honor member of the Jackson County Medical Society; aged 74; died July 13.

NEW MEMBERS

Ahlering, George H., M.D., St. Louis
Auner, Cecil R., M.D., St. Louis
Backer, Matt H., Jr., M.D., Affton
Becker, Bernard, M.D., St. Louis
Bishop, Mary McFayden, M.D., Ferguson
Bond, Franco G., M.D., Flat River
Burke, Donald R., Jr., M.D., St. Louis
Catanzaro, Francis J., M.D., St. Louis
Day, Cameron B., M.D., St. Louis
Donahoe, James L., M.D., St. Louis
Enna, Carl D., M.D., Kansas City
Fox, Charles R., M.D., Kansas City
Griggs, James Y., M.D., St. Louis
Hartwig, Frederick H., M.D., Kansas City
Hoffman, Ronald E., M.D., St. Louis
Humphrey, Harvey A., M.D., St. Louis
Kuhn, William F., II, M.D., Kansas City
McComas, Robert E., M.D., Kansas City
McGinnis, Albert E., M.D., St. Louis
Moody, Jackson C., M.D., Clinton
Nash, Francis P., M.D., St. Louis
Nicholson, Ralph L., M.D., Excelsior Springs
Niedermeyer, George J., M.D., St. Louis
O'Donnell, Joseph V., M.D., St. Louis
Oetter, Donald L., M.D., St. Louis
Payne, William S., M.D., St. Louis
Penninger, William H., M.D., Springfield
Quer, Erich A., M.D., Kansas City
Riley, Philip A., Jr., M.D., St. Louis
Russell, Earl D., M.D., Springfield
Schuster, Joseph M., Jr., M.D., St. Louis
Siemers, George E., M.D., St. Louis
Sullivan, James F., M.D., St. Louis
Sutherland, John C., M.D., St. Louis
Thiele, Belmont R., M.D., St. Louis
Thomas, Wilbur A., M.D., St. Louis
Trunko, Leo, M.D., St. Louis
Van Metre, Thomas E., Jr., M.D., St. Louis
Walker, James W., M.D., Hayti

KANSAS CITY UROLOGICAL SOCIETY

SCHEDULE OF DINNER MEETINGS FOR 1954-1955

Place, Union Station, Fred Harvey Restaurant Pine Room.

Hour, Social 6:00-6:30; dinner 6:30-7:15, papers 7:15-8:00, Urograms 8:00-9:00.

1. Sept. 15, 1954: W. M. Valk, M.D.; R. H. Owens, M.D., Kansas City, "The Clinical Significance of Renal Efficiency."

2. Oct. 7, 1954: J. J. Cordonnier, M.D., St. Louis; A. L. Stockwell, M.D., Kansas City, "Uretero-enterostomy." Moving Picture.

3. Nov. 17, 1954: A. G. Isaac, M.D., Newton, Kansas; D. Irby, M.D., Ft. Scott, Kansas, "Tumor of the Bladder."

4. Jan. 19, 1955: R. L. Hoffmann, M.D., Wm. M. Leifer, M.D., Kansas City, "The Female Urethra."

5. Feb. 16, 1955: J. G. Siceluff, M.D., Springfield; B. W. Andrews, M.D., Kansas City, "Untoward Reactions From Urogram Injections."

6. Mar. 16, 1955: H. E. Carlson, M.D., J. Zellermayer, M.D., Kansas City, "Urinary Calculi."

7. Apr. 24, 1955: C. W. Davidson, M.D., Kansas City; R. Bristow, M.D., St. Joseph, "Urogenital Anomalies." Election of Officers.

Urograms. The last hour of each session is devoted to the presentation and interpretation of Urograms. During the past years this feature has continued to increase in interest and value.

Invitations. All urologists in this area are cordially invited to attend and participate in these meetings. Come and bring films.

C. S. Capell, M.D.

WHEN SYMPTOMS ARE DISTRESSING BUT DISGUISED . . .

"It is strange," Malleson says, "how little clinical recognition" has been given to the "negative behavior" or "endogenous misery" of the woman with endocrine imbalance. Largely accountable for this, of course, is the patient's own reluctance to discuss these symptoms with her physician until she actually suffers from some of the more obvious menopausal symptoms such as hot flushes. Even then she may become so accustomed to her change in feeling she can't remember what it's like to feel well.[1]

Changes in the mood pattern are just a few of the many distressing symptoms of declining ovarian function which are so often disguised because they do not always coincide with cessation of menstruation, and at times will occur long before, and even years after. Other good examples are insomnia, headache, easy fatigability, arthralgia — and understandably so, when one considers that the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism."[2]

"Premarin" is a preparation of choice for the replacement of body estrogen. "Premarin" presents a *complete* equine estrogen-complex and all the components of this complex are meticulously preserved in their natural form. This largely explains why "Premarin" not only produces prompt symptomatic relief but also imparts an important "plus" — the distinctive "*sense of well-being*" that patients find so highly gratifying. These benefits of "Premarin" have made it a natural estrogen widely prescribed by physicians . . . and often preferred by patients.

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1. Malleson, J.: Lancet 2:158 (July 25) 1953. 2. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc. 1953, p. 23.

NEW YORK, N. Y. Ayerst MONTREAL, CANADA

5409

POLIO VACCINE TRIAL NEEDS PHYSICIANS' AID AS IT MOVES INTO EVALUATION PHASE

More than 600,000 children have completed three inoculations, in the field test of the trial polio vaccine developed by Dr. Jonas E. Salk of the University of Pittsburgh. The emphasis now shifts to the evaluation study under the direction of Dr. Thomas Francis, Jr., University of Michigan School of Public Health. The validity of the evaluation is dependent upon data gathered on poliomyelitis cases in the test groups, including those children in the first three grades who did not get vaccine.

In addition, data on cases among family members of participating children are an integral part of the study. Since the number of poliomyelitis cases among the test groups may not be large, it is essential that all cases are completely reported. Early diagnosis, prompt reporting and follow-up, and the securing of necessary epidemiologic information and laboratory specimens are important factors in the evaluation.

An outline of procedures and copies of necessary forms have been sent to local and state health authorities. It is important that physicians in areas where vaccinations were not given, cooperate in the study by notifying local or state health officers of cases occurring among children who participated in the trials and then migrated to another area and children who go to summer camps. Local health officials also need information on participating children who receive injections of Gamma Globulin.

This phase of the study will depend, to a large degree, on the wholehearted cooperation of practicing physicians.

SOUTHEAST MISSOURI CANCER CONFERENCE

The first annual Southeast Missouri Cancer Conference will be held on September 30 at the Southeast Missouri State College, Cape Girardeau. The program will start with a noon luncheon, following registration at 11:30 a.m.

Subjects to be presented by guest speakers at the session beginning at 1:15 p.m. are: Cancer of the Cervix, Cancer of the Breast, Cancer of the Skin and Lip, Cancer of the Head and Neck, and Measuring the Effect of Treatment of Cancer. Guest speakers will be Irving M. Ariel, M.D., New York; Oliver H. Beahrs, M.D., Rochester, Minn.; A. N. Arneson, M.D., St. Louis; Juan A. del Regato, M.D., Colorado Springs, and Richard E. Johnson, M.D., Columbia.

A cocktail hour at 5:30 p.m., and a banquet at 6:45 p.m., will be followed by a clinic session at 8:00 p.m. at which problem cases in cancer diagnosis and therapy from the files of the Southeast Missouri Tumor Clinic will be presented and discussed by guest speakers.

Reservations may be made through Milton Shoss, M.D., Southeast Missouri Hospital, Cape Girardeau.

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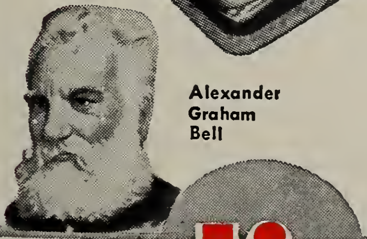

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Councilor District News

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

Arthur W. Neilson, M.D., St. Louis, spoke on "Dermatology in General Practice" at a dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society at Rolla on July 29. The wives of Society members were also in attendance.

This scientific presentation was sponsored by the Missouri Academy of General Practice. Academy members present received Grade A credit toward their academy postgraduate requirements.

M. K. UNDERWOOD, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for a picnic and afternoon of sport and relaxation at the summer cabin of Dr. **C. W. Cooper**, Thayer, on Spring River below Mammoth Springs, Arkansas, on July 15. The following members and visitors were present: **Drs. R. W. Denney, S. W. Connor** and **A. C. Ames**, Mountain Grove; **M. B. Perkins**, Willow Springs; **J. N. Wiles** and **M. L. Fowler**, West Plains; **A. T. Walker**, Mammoth Springs, and **C. W. Cooper**, Thayer, and the wives and daughters of most of them.

After a while of swimming, wading, boating, target shooting, pitching horseshoes and shuffleboard, Mrs. Cooper served a bountiful dinner. All went home wishing members not present could have enjoyed it also.

A. C. AMES, M.D., *Secretary*

News From the Medical Schools

UNIVERSITY OF MISSOURI NEWS

Appointments: Two new departmental chairmen at the School of Medicine were appointed recently. Dr. Joseph E. Flynn, Associate Professor of Pathology, Columbia University, College of Physicians and Surgeons, became Professor and Chairman of the Department of Pathology, replacing Dr. M. Pinson Neal, who has relinquished the chairmanship because of illness. Dr. Thomas D. Luckey, formerly Associate Research Professor of Biochemistry, Notre Dame, became Professor and Chairman of the Department of Biochemistry, replacing Dr. Addison Gulick, Professor Emeritus. Other additions include Dr. Walter R. Hepner, Jr., formerly Assistant Professor of Pediatrics, of Texas Medical Branch, Galveston, Texas, as Associate Professor of Pediatrics, and Dr. Stuart O. Landry, from the U. of California, Berkeley, as Instructor in Anatomy.

Death: Dr. Floyd A. Martin, Professor of Microbiology for many years, died on June 2, 1954, of self-inflicted gun shot wounds.

Building: The Board of Curators accepted construction contracts early in June, for the footings and excavations for the new Medical Sciences building. It is hoped that the final plans for the building will be completed and ready for bids late in the summer of 1954.

Nursing School Change: The Board of Curators abolished the Department of Nursing Education, and created the U. of Mo. School of Nursing, effective July 1, 1954; Miss Virginia Harrison will serve as Acting Director. Miss Harrison recently completed a six weeks tour of nursing programs on the east coast and in Denver, on a Rockefeller Foundation travel grant.

Gift: Mrs. Constance Emig, Head Resident of Gentry Hall, has given $1,000 as a loan fund for medical students, to be known as the Arthur Samuel Emig Memorial Loan Fund, honoring her late husband, for many years Professor of Sociology.

We Travel, Talk: Dr. William A. Sodeman, Professor of Medicine, was guest speaker for the California Medical Association in Los Angeles, from May 9-13, the New Mexico Medical Association from May 16-17, and returned to direct the first Missouri Annual Heart Day Conference on May 20, sponsored jointly by the School of Medicine and the Missouri Heart Association. Guest speakers included Dr. William Jeffers, Associate Professor of Medicine, U. of Penn., and Dr. Arthur Grollman, Professor of Experimental Medicine, Southwestern Medical School of the U. of Texas, in a program devoted to hypertension.

Dr. Robert L. Jackson, Professor of Pediatrics, addressed the Pan-American Pediatric Congress in Brazil, in August, on "Growth Problems in Children."

Dr. Clarence D. Davis, chairman of the Department of Obstetrics and Gynecology, represented the U. of Mo. School of Medicine at the annual A.M.A. meeting in San Francisco.

Dr. Roscoe L. Pullen, Dean of the School of Medicine, addressed the Missouri Public Health Association in St. Joseph, on April 30; the Kansas City Academy of General Practice in Kansas City, Missouri, on May 20; the Greene County Medical Society, in Springfield, on May 28; and the Tulsa, Oklahoma, Academy of General Practice on June 14. On June 3, Dr. Pullen was honored to present the Annual Vinsonhaler Lectureship at the U. of Arkansas School of Medicine, honoring their former dean.

WASHINGTON UNIVERSITY NEWS

Graduates: Degrees awarded in June included 133 in the School of Medicine (including 14 Masters of Hospital Administration); 90 in the School of Nursing; and 50 in the School of Dentistry

Appointees: Dr. W. Stanley Hartroft, a Professor in Medical Research at the U. of Toronto, has been appointed Edward Mallinckrodt Professor and head of the Department of Pathology. Dr. Hartroft, effective September 1, will succeed Dr. Robert A. Moore, who is now vice chancellor at the U. of Pittsburgh.

Honors: Two faculty members received honorary doctor of science degrees from other schools in June.

for greater safety in streptomycin therapy...

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Squibb Streptoduocin
Streptomycin and dihydrostreptomycin in equal parts

Distrycin has an important advantage over streptomycin. It has the same therapeutic effect but ototoxicity is greatly delayed. Since the patient is given only half as much of each form of streptomycin as he would have on a comparable regimen of either one prescribed separately, the danger of vestibular damage (from streptomycin) or cochlear damage (from dihydrostreptomycin) is significantly lessened.

Signs of vestibular damage appear in cats treated with Distrycin as much as 100 per cent later than in animals given the same amount of streptomycin.

Cat treated with streptomycin shows no nystagmus after whirling.

Cat given the same amount of Distrycin has normal reflex.

On dosage of 1 Gm. per day for 120 days, ototoxicity was as follows*:

	Vestibular damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	12	6	18
Dihydrostreptomycin	6	0	6
Distrycin	0	0	0
	Cochlear damage % of patients		
	Mild	*Moderate*	*Total*
Streptomycin	0	0	0
Dihydrostreptomycin	12	3	15
Distrycin	0	0	0

**Heck, W.E.; Lynch, W.J., and Graves, H.L.: Acta oto-laryng. 43:416, 1953.*

Distrycin dosage is the same as for streptomycin. In tuberculosis the routine dose is 1 Gm. twice weekly, in conjunction with daily para-aminosalicylic acid or Nydrazid (isoniazid). In the more serious forms of tuberculosis, Distrycin may be given daily, at least until the infection has been brought under control.

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Dr. Gerty Cori, Professor of Biological Chemistry, received the honor from Columbia U. Dr. Wendell G. Scott, Professor of Radiology, and a 1932 graduate of the Medical School, received the award from the U. of Colorado.

Robert Jones Club: Dr. J. Albert Key, Professor of Clinical Orthopedic Surgery, was host to 20 members of the Robert Jones Club on May 13-15. The Robert Jones Club, founded after World War I, includes members from the United States and Toronto, Canada. The meeting was the second held in St. Louis.

Lecture: Dr. Evarts A. Graham, Bixby Professor Emeritus of Surgery, and Lecturer in Surgery, delivered the first annual Jacob Jesse Singer lecture before the annual meeting of the American College of Chest Physicians, in San Francisco, on June 20. Dr. Singer, a 1904 graduate of Washington University School of Medicine, died in April, after the lectureship was established by the California Chapter of the American College of Chest Physicians.

ST. LOUIS UNIVERSITY

Alumni Elected: New officers of the St. Louis U. School of Medicine Alumni Association installed at the annual reunion meeting in San Francisco, California, on June 23: Dr. Garold Stryker, St. Louis, president; Dr. William Maloney, Oakland, California, and Dr. Joseph Gamba, Newark, New Jersey, vice presidents; and Dr. Clement B. Grebel, St. Louis, secretary-treasurer. Dr. Daniel Sexton, St. Louis, is retiring president.

New Publication: Dr. Chester P. Lynxwiler, Assistant Professor of Clinical Pediatrics, St. Louis U. School of Medicine, and Dr. Vincente Moragues, Associate Professor of Pathology, Creighton U. School of Medicine, have had accepted for publication, by Williams and Wilkins, Baltimore publishers, their new book on congenital heart disease. The book, "Clinical-Pathological Correlation of Congenital Heart Disease," will appear sometime in late fall. Cases reported are only those cases which have been verified by surgery or autopsy, and represent all types of congenital lesions from the standpoint of history, physical examination, laboratory studies, electrocardiographs, radiological studies, treatment and prognosis. The book contains some 200 illustrations, comprised of photographs, electrocardiographs, drawings and charts, and is designed to serve either as a textbook for medical students or a reference for pediatricians, general practitioners and others interested.

Progress Notes of Prepayment Plans

(St. Louis Blue Shield)

The number of persons protected by the St. Louis Blue Shield Plan (Missouri Medical Service) reached a new high of 380,959 in the fiscal year ended last April 30. This was announced by Carl F. Vohs, M.D., president of the plan, in the organization's 1953-54 annual report, made public today. The comparable membership figure for the previous fiscal year was 355,125.

The St. Louis Blue Shield Plan is a nonprofit medical-surgical care plan sponsored by the Missouri State Medical Association. It covers all of Missouri except 30 counties in the western part of the state.

During the year medical, surgical, obstetrical, x-ray, anesthesia and pathology benefits paid by the plan for members amounted to a record $3,352,752, the report stated. This compares with $2,711,454 the preceding year. Dues from members in the 1953-54 period totaled $4,622,641, compared with $2,921,852 during the preceding fiscal period.

Dr. Vohs stressed the diversification of Blue Shield services for which benefits are being paid and pointed out that the total of 137,529 services on which payments were made during the fiscal year comprised the following: surgical 36,296; obstetrical 7,660; medical 21,707; x-ray 21,480; anesthesia 23,102, and pathology 27,284.

The financial report shows the plan has assets of $1,766,846.

"The steady growth of our plan has helped over 380,000 Missourians prepay medical and surgical care on a voluntary basis," Dr. Vohs said in the report. "Every one of our participating physicians can be proud of that record, for it undoubtedly stems in large measure from the medical profession's recommendation of Blue Shield to the public."

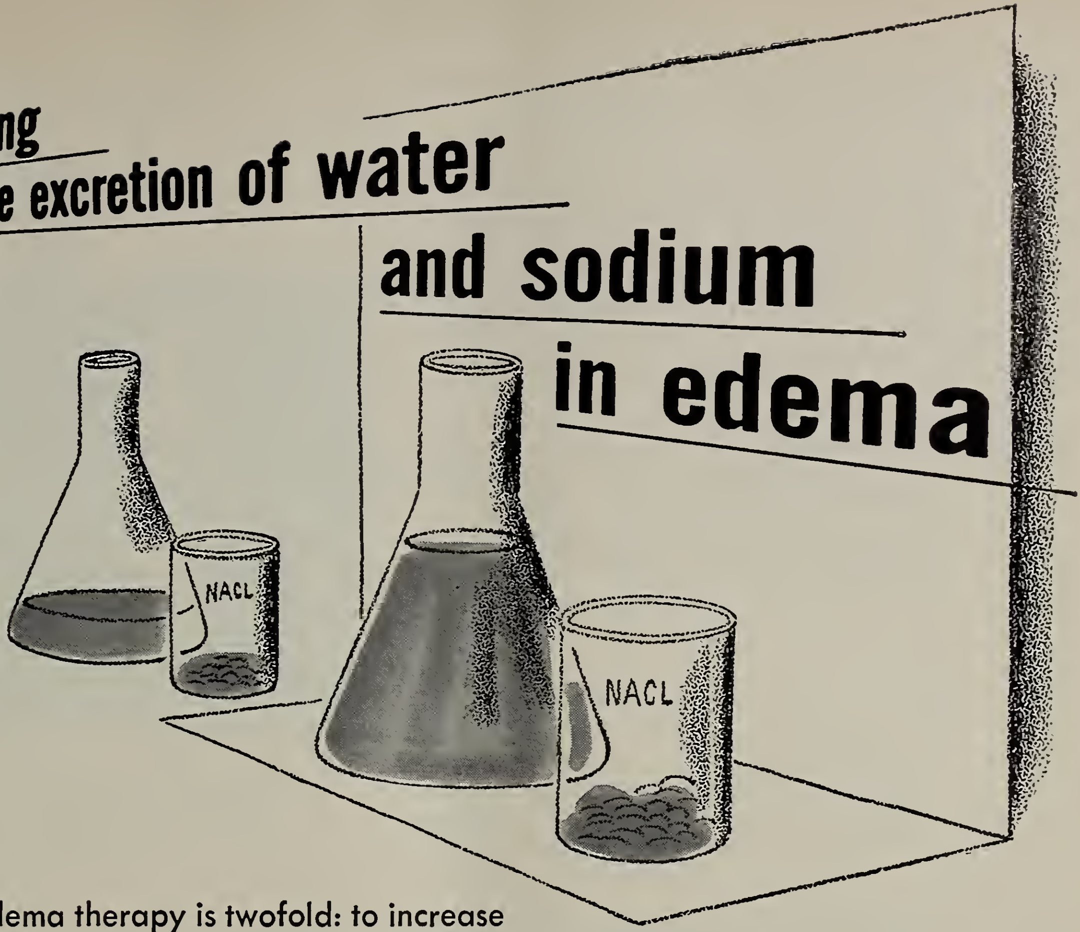
Officers of the St. Louis Blue Shield Plan, in addition to Dr. Vohs, are: J. William Thompson, M.D., St. Louis, first vice-president; Louis W. Reps, Springfield, second vice-president; Raymond O. Muether, M.D., St. Louis, secretary, and George M. Berry, St. Louis, treasurer.

Members of the board of trustees of the organization are: Robert Arthur, St. Louis; W. A. Bloom, M.D., Fayette; R. J. Connors, St. Louis; E. C. Ernst, M.D., St. Louis; W. F. Francka, M.D, Hannibal; Frank W. Hall, M.D., Cape Girardeau; R. W. Kennedy, M.D., Marshall; Curtis H. Lohr, M.D., St. Louis; Maurice J. Lonsway, M.D., St. Louis; Robert Mueller, M.D., St. Louis; John W. Noble, Kennett; Joseph Ondr, St. Louis; Llewellyn Sale, M.D., St. Louis; W. S. Sewell, M.D., Springfield; Chester G. Starr, Jefferson City, and J. H. Summers, M.D., Lebanon.

The Sticks?

. . . There is no real isolation in rural practice these days. Good roads, telephones, and radio, small hospitals and near-by medical libraries, are within reach of all doctors. And there are family advantages to the doctor who practices in a small town.—Roscoe L. Pullen, M.D., Address to M.A.G.P.

increasing the excretion of water and sodium in edema



The aim of edema therapy is twofold: to increase the volume of fluid excreted from the body and, of equal importance, to effect a removal of water-binding sodium ions.

Salyrgan-Theophylline, established through the years as a dependable mercurial diuretic, performs both of these functions.

SUPPLIED:

Ampuls of 1 cc. and 2 cc. — boxes of 10, 25 and 100.

Tablets — bottles of 100, 500 and 1000.

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Clinical response to Salyrgan-Theophylline is usually rapid. Within the first day after administration much of the excess tissue fluid is mobilized and eliminated. Up to 10 liters may be excreted in a twenty-four hour period. Similarly, excretion of 20 Gm. or more of sodium chloride within twenty-four hours after Salyrgan-Theophylline has been observed.[1,2]

For removal of edema and ascites in cardiac and cardiorenal diseases; nephrosis, and cirrhosis of the liver.

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1. Nielsen, A. L., Bechgaard, P., and Bang, H. O.: Low-Salt Diet in Treatment of Congestive Heart Failure. *Brit. Med. Jour.*, 1:1349, June 16, 1951.
2. Brown, W. E., and Sutherland, C. G.: Control of Edema in Pregnancy. *GP*, 8:65, Nov., 1953.

PHARMACEUTICAL HOUSE HONORED FOR MEDICAL TV PROGRAMS

In a presentation ceremony at the House of Delegates meeting in the Palace Hotel, San Francisco, Dr. Walter B. Martin, Norfolk, Va., new President of the A.M.A., conferred the following citation upon Francis Boyer, president of Smith, Kline & French.

"The American Medical Association takes pleasure in presenting this citation to Smith, Kline & French Laboratories for its pioneering use of television in bettering the health of the nation.

"Through color television programs for doctors, you have contributed immeasurably to increasing medical knowledge.

"Through your 'March of Medicine' programs, you have portrayed to the public the vital role of the doctor—both in the research laboratory and in his treatment of the sick.

"Because of these outstanding contributions to medicine, you have proved yourself deserving of this special recognition."

The award was made on the fourth day of the A.M.A.'s annual meeting at which a week long program of color telecasts has been produced and sponsored by S.K.F. for the 12,000 attending physicians. This fifth anniversary program is the 11th presented at A.M.A. meetings since S.K.F. inaugurated medical color TV as a contribution to postgraduate teaching, in June, 1949. It is the 58th program the pharmaceutical house has presented at medical meetings from California, to Canada and Paris, France, during the last five years.

The "March of Medicine," black-and-white medical telecasts to the general public, was originated in June, 1952, reporting highlights of the A.M.A. Chicago meeting. A feature of the inaugural telecast was the telecasting of a stomach operation, performed at Wesley Memorial Hospital. Since then, these telecasts, viewed by audiences ranging up to 14,000,000, have shown postnatal care following a cesarean section, care of mental patients, advances in surgery as shown by the Brodie twins separation, and medical progress in such fields as heart disease, cancer, obesity and arthritis.

Designed to show the contributions being made by the medical profession to the nation's health, the "March of Medicine" has become one of the top educational and entertainment programs in TV today.

MoMedics will recall S.K.F. presentations at several of our annual meetings, which were well received by our members.

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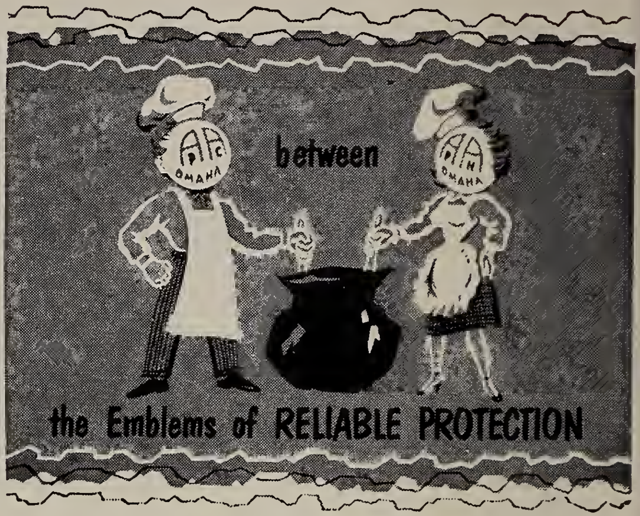
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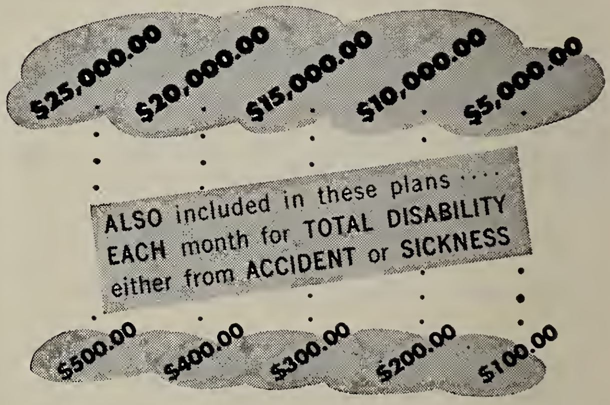
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In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

Twenty-five years ago experience had bettered the methods. Today with the advantages of collateral medicine, treatment is markedly further improved.

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℞: Common Sense

Nose Drops

Jesse D. Rising, M.D.

Next to the skin, the nose is probably the easiest part of the human body to medicate, and probably even more often than the skin it is overmedicated. A human being with a stopped-up nose is a miserable creature, and it is a hard hearted doctor indeed who is not inclined to give the patient relief. All too often, though, the ministrations of the physician add to the person's difficulties, so it behooves every physician to understand at least the basic principles of medication to the nose.

Nose drops are usually used for one of two purposes: (a) to relieve nasal congestion, or (b) to combat infection. The consensus of authorities in the field is that local anti-infective agents invariably do more harm than good, so we will eliminate this as a legitimate aim of nasal medication. Anti-infective agents, when indicated, are best given systemically.

This leaves us the consideration of decongestants. Shrinking of the nasal mucosa can be accomplished either by systemic medication with such sympathetic amines as ephedrine, propadrine and such. They can also be applied by means of local application in drops. Nose drops have gotten a bad name in many quarters for several reasons. One of these is that overuse of nose drops has been responsible for much nose and throat irritation. Another is that improper types of medication have been used and have caused trouble. Certain drugs have been implicated, and it is common to hear of "Privine nose." Let us clear up this point. Any sympathetic amine, when applied to the nasal mucosa, will cause vasoconstriction and shrinking of the membranes. Following the period of vasoconstriction, there is invariably a period of hyperemia and swelling. The more frequently the vasoconstrictor is applied, and the longer the period of its use, the more this "rebound swelling" will be. In addition to this the more potent the vasoconstrictor, the more profound will be the "rebound swelling." Privine is an exceedingly potent agent that lacks the side effects of psychic stimulation. When it is used in the full strength (0.1 per cent) solution, as it often is, the capillary constriction is excessive as is the rebound dilatation. The so-called syndrome, "Privine nose," is most often seen when this solution is used, because of the tendency to overuse it, and because the vasoconstriction is so powerful. It should be remembered, however, that the "Privine nose" is not limited to patients who have received Privine, but can occur following the use of any vasoconstrictive nose drops. Most doctors now only use the weaker (0.05 per cent) solution of Privine even for adults; it is effective and causes less "rebound swelling."

Every physician should remember a few general principles about nose drops: They should be aqueous; they should be isotonic; and they should be slightly acid with a pH range of from 5.6 to 6.5. Any nose drops should be employed with due respect for the nasal physiology.

Oily nose drops are deleterious for two reasons: First, they thicken the mucous blanket covering the nasal mucosa and thereby impede the removal of noxious material from the nose. Secondly, they tend to find their way into the tracheobronchial tree and cause lipoid pneumonia.

Hypotonic solutions, when applied to the nose, cause swelling of the mucosal cells and slowing of the cilia which normally remove bacteria and dust. Lastly, nose drops which are neutral or alkaline in reaction impair the ciliary action or actually kill the epithelial cells to the detriment of the patient.

There are several proprietary nose drops which fulfill the criteria for physiologic applications, and some of them are listed.

Nose drops may be prescribed extemporaneously by adding ephedrine sulfate either to isotonic sodium chloride solution or to a 5 per cent solution of dextrose in distilled water. This vehicle is aqueous and isotonic, and the addition of ephedrine sulfate brings the pH into the physiologic range. Ephedrine sulfate may be used in 0.5 to 3 per cent concentration, but it is better not to exceed 1 per cent except for solutions used in the office for diagnostic shrinking. For adults one may direct that ten drops be used in each nostril with the patient in the head low position, i.e., with the top of the head pointing at the floor. The drops should be left in place for one or two minutes, then the patient should let them run out the nostrils on to a tissue. Any drops running down the throat are to be spit out, otherwise the patient may become excited and develop tachycardia. Patients should be cautioned about this and told that, should the symptoms develop, it is not dangerous—merely annoying.

A prescription for 1 per cent ephedrine may be written either as:

Rx:	Ephedrine Sulfate	0.3
	Isotonic Solution of Sodium Chloride q.s.ad.	30.0
or		
Rx:	Ephedrine Sulfate	0.3
	Dextrose	1.5
	Distilled Water q.s.ad.	30.0

The amount of ephedrine can easily be varied according to the patient's age or other considerations. Most ready made drops cannot be changed easily as they are in special buffered vehicles and, when diluted with saline, may become irritating. For example, a 1 per cent nasal solution of Neo-Synephrine when diluted to ¼ per cent is quite intolerable to many patients.

Youngsters almost always swallow part of their nose drops, so a nonexciting drug should be used. This is probably the prime indication for the use of Privine (0.05 per cent) or Neo-Synephrine (¼ per cent). Even these should not be used in quite young children, so if the parent demands nose drops, I usually order "Liquor Sodii Chloridi Isotonici" which is probably harmless and helps to wash out some of the crusts and pus that the little darlings routinely harbor.

Some of the commoner nose drops are listed here

ADEQUATE PROTEIN

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Extemporaneous ephedrine Rx (as above)	1.00

The actual cost to the druggist for the extemporaneous prescription is only about 35 cents, including the dropper bottle, so he has quite a margin for the professional fee. You can see that this prescription should be less expensive for the patient, more profitable for the druggist, and has the additional advantage of flexibility. The latter consideration is of some therapeutic importance.

In summary, do not prescribe nose drops unless they are truly indicated. If they are indicated be sure to use a preparation that does not disrupt the physiology of the nasal mucosa and impair its native ability to combat infection. Oils, aromatic irritants and antiseptics are unphysiologic. Nose drops should be aqueous, isotonic and slightly acid. Any doctor can write an extemporaneous prescription for nose drops that fulfills these requirements, and such a medication is superior to any of the proprietary preparations for most patients.

Letter to Missouri Medicine

"Perinatalist"

To the Editor:

Dr. Helen Bellhouse of Atlanta, Ga., aroused some interest in obstetric practice by asking if the adjective "perinatal" might be used to designate a full obstetric service. This word sounded reasonable to me since it applied to the "predelivery, delivery and postdelivery experience of the infant."

An excellent term! It was originally suggested by Dr. Bierman. In a paper I read before the Tennessee Medical Society (years ago), I advised that the pediatrician should not take charge of the baby for several days after birth. The accoucheur should be displaced by the pediatrician only after the former has given up breast-feeding. What does the pediatrician know about the mother and her family history? The custom of turning over the baby's care to the child doctor as soon as it is born is a deplorable hospital custom.

As most of the babies are born in a hospital I see a new specialist appear—call him the "perinatalist." He must be well trained in recognizing and treating disorders in the mother and infant before, during and after birth. Let the pediatrician stay away for three or four days unless the accoucheur wants the baby doctor as a consultant, but the "perinatalist" remains responsible for mother and baby and it is he who will acquire the highest proficiency in preventing the neonatal disorders. Yes, I am disposed to encourage another specialist: neonatalist (or some other acceptable name). Now, repeat the old joke: "Nothing but the umbilicus remains for the general practitioner."

Really, I feel that the recent research by pediatricians has reached the end of practical service. The search for some life saving technic is incessant but clinical mistakes are frequently made. What about the administration of concentrated oxygen? Does not this practice produce a pulmonary hyaline membrane and retrolental fibroplasia? Shall we starve the 3-pound baby for twenty-four hours? Why not give a little human milk? Will a nasal catheter help the recurrent attacks of cyanosis? It was demonstrated years ago that human milk trebles the germicidal potency of the blood—why so many pulmonary infections after birth?

Yes, give the perinatalist a trial. He may save a few babies by early feeding and giving a few whiffs of oxygen for cyanosis. And warm baths, too, should be reinstated.

John Zahorsky, M.D.
Steelville, Mo.

REFRESHER COURSE ON "ON THE JOB INJURIES"

"The Family Doctor's Role in On the Job Injuries" is the subject of a University of Kansas Medical Center refresher course to be given December 6, 7 and 8. Additional sponsors of the course are the Missouri Academy of General Practice, the Kansas Academy of General Practice, the Joint Committee representing the Council on Industrial Health of the American Medical Association, the Commission on Education of the American Academy of General Practice and the Industrial Medical Association.

The course is designed to meet the problems of the general physician who must be prepared to handle all types of accidents and sickness affecting people while engaged in their work. The continual increase in the number and complexity of mechanical equipment and chemicals used around the home, on the farm and in many small businesses, increases the demand on the family doctor for what is ordinarily considered industrial medicine. One day will be devoted to compensation records, health examinations and elimination of occupational hazards. The second day will take up such medical aspects as poisoning, dermatitis and dust, while the last day will cover the field of trauma and surgery.

A copy of the complete program is available upon request from the Department of Postgraduate Education, University of Kansas Medical Center, Kansas City 12, Kansas.

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Musings of the Field Secretary

(*Continued from page 759*)

At a morning general session of the Workshop, on the final day, Dr. John S. Sennott, Jefferson City, member of the Committee on Infant and Child Care of the Missouri State Medical Association, demonstrated good procedures relating to physical examinations for school age children. He gave an examination to a school age child with explanatory interpretations to the audience as he went along. An open question and answer period followed completion of the examination.

At the close of the Workshop all participants were given opportunity, in writing without signature, to express their opinion of the Conference and their suggestions for improvement.

The one suggestion for improvement which seemed to be most universal throughout the group was to have more school superintendents, more classroom teachers and more practicing physicians in attendance and particularly to take part in the group discussions. How to accomplish this is the 64 dollar question.

A unique bit of good public relations on the part of the Dunklin County Medical Society came to light recently. This Society placed an ad in the newspaper circulating in that County endorsing Blue Cross and Blue Shield. In the ad the Society also suggested and recommended that if a group is not available to a person, to join the Farm Bureau through which it can be obtained. Mr. Chester Starr, Director, Rural Health Service, Missouri Farm Bureau Federation, says that a considerable part of the effective work in increasing Blue Cross and Blue Shield enrollment in Dunklin County Farm Bureau Units is due to this wholehearted endorsement of the opportunity to have prepaid medical and hospital care by the doctors of the county.

BOOK REVIEW

Surgical Pathology, by Lauren V. Ackerman, M.D., Professor of Surgical Pathology and Pathology, Washington University School of Medicine; Surgical Pathologist, Barnes Hospital and Affiliated Hospitals, St. Louis; Consultant to the Ellis Fischel State Cancer Hospital, Columbia, Mo.; Consultant to the Armed Forces Institute of Pathology. With 913 Illustrations. The C. V. Mosby Company, St. Louis. 1953. Price $14.50.

Dr. Lauren V. Ackerman has created a dynamic pathologic review in his new contribution to the literature on surgical pathology. His plan is to include material which is pertinent to clinical problems and useful to the surgeon in his evaluation of living patients. In this regard the subject matter of the book differs from the general pathology texts, serving not as a replacement but rather as a supplement to these books.

As noted in the preface this book can serve only as an introduction rather than a complete survey of any particular topic, but one will be impressed by the abundance of facts and philosophy brought forth. In truth the magnitude of the data presented at times interferes with the continuity of the style so that the reader must carefully follow and assimilate each sentence before proceeding to the next.

A great deal of attention should be paid to the selected bibliography which provides a most useful source for further study when more information is desired. One could not overemphasize the value of this part of the book. Similarly the illustrations are outstanding in quality and applicability and thoroughly adequate in number.

With these many attributes, "Surgical Pathology" by Ackerman should represent a valuable reference for both surgeons and pathologists as well as others interested in this subject. J. C. P., Jr.

100% Are Surgical Problems

. . . Every open wound needs and deserves surgery. Either it is ready for closure by suture or skin graft or it needs debridement to prevent or eliminate sepsis and the destruction of living tissue and to prepare it for closure. The spotlight should fall on the pathological process in an open wound rather than on its bacterial flora. Dead tissue should be excised whenever and wherever it is found; dead space must be obliterated or dependently drained. Atraumatic technique with fine hemostats and ligatures is advisable, and pressure dressings and precise splinting are valuable adjuncts. Antibiotic therapy is often indicated as a safeguard against invasive infection. Wound healing is a natural cellular process provided the wound does not contain dead tissue, strangulating ligatures, or foreign bodies. Adequate surgery will eliminate or prevent these and promote early healing of a wound, thereby achieving the objectives of wound management.—Oscar P. Hampton, Jr., M.D., St. Louis, *J.A.M.A.*

No Lobby in Jefferson City

. . . Missouri must start rebuilding its mental institutions from the ground up . . . if we don't, we will find ourselves just as custodians of the mentally ill.

. . . old people need custodial care, but the jamming of our mental institutions has been such that they are becoming rest homes for custodial patients rather than mental institutions.

. . . the mentally ill have no lobby in Jefferson City. They can't even vote. It is up to the rest of us to bring their problem before the public and before the State Legislature.

. . . It is interesting to note that the state of Kansas spends approximately $4 per day on its patient care and the American Psychiatric Association suggests $5 per day. . . . Missouri's complete average cost per patient is $1.89 per day.

. . . Missouri's scale for hospital superintendents . . . is between $8,000 and $8,500. . . Kansas now pays between $11,000 and $12,000 . . . plus housing and food.—Senator Albert M. Spradling, Cape Girardeau, Address to Missouri Hospital Association.

Jesuit Journal Approves A.M.A. Stand

. . . Dr. Edward McCormick, president of the A.M.A., has repeatedly voiced opposition to (this) Government largess. Behind the A.M.A. opposition lies the fear that socialized medicine may get into this country

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through the back door of the Veterans Administration. . . . If free medical service in state-owned hospitals from state-salaried doctors becomes the rule, the Government, the doctors claim, will soon control medicine. A.M.A. fears on this point seem well-founded . . . a test sample of 350 patients recently discharged from VA hospitals, found incomes ranging from $4,000 to $50,000. Twenty-five of these veterans had real property and other assets of from $20,000 to $500,000. Yet all had presumably sworn that they were unable to defray expenses. As an editorial in *New York Medicine* remarks: "Seldom has lying been so amply rewarded. Seldom has perjury been so widely condoned." The A.M.A. deserves strong support on this issue.—Editorial, *America.*

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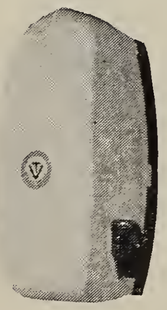

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Special Notice—Because of ill health I am closing my office. Office equipment including x-ray and microtherm for sale at a sacrifice. This town is a marvelous opportunity for a doctor who wishes to begin making money from the first day he opens an office. Address, W. J. Rutledge, M.D., Campbell, Mo.

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Curiosa et Trivia

William B. McCunniff, M.D.

Famed poetess Charlotte Bronte died of pernicious vomiting of pregnancy.

Who remembers the meaning of the word "costiveness"?

The recipient of the James E. Sullivan Memorial Trophy as the outstanding amateur athlete of 1953 is Sammy Lee, M.D., currently attached to the 121 Evacuation hospital as an E.N.T. man.

A Scottish physician solved a major chemical problem of the Kentucky frontier when he devised a method for making a successful corn beverage. His name, Dr. James Crow.

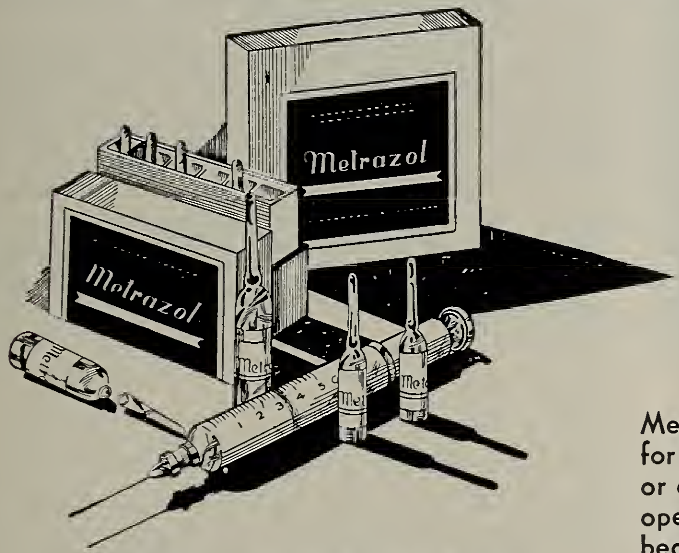
A song written by Ben Chadwich in 1897 is reported to have been a hit: "Little Teddy" refers to the sick child pictured in Sir Luke Fildes' picture "The Doctor."

A survey reports that in a single year, 4,000 football players in sixty-two colleges lost or broke 733 teeth.

Bacteria settle out of the air in a clean operating room at the rate of 30,000 viable organisms per aseptic field per hour. With careless housekeeping or dirty air-conditioning, the count will rise to hundreds of millions per hour.

The Kaiser Foundation's new hospital in Los Angeles includes, among other items, double halls servicing rooms so that professional personnel need never run afoul of visitors who use an entirely different system of hallways.

Healthy 2 month old Michael McGlothen has established his claim to fame: born by cesarean operation, he was immediately operated on for removal of an intracranial bullet due to his mother's prenatal gunshot wound.



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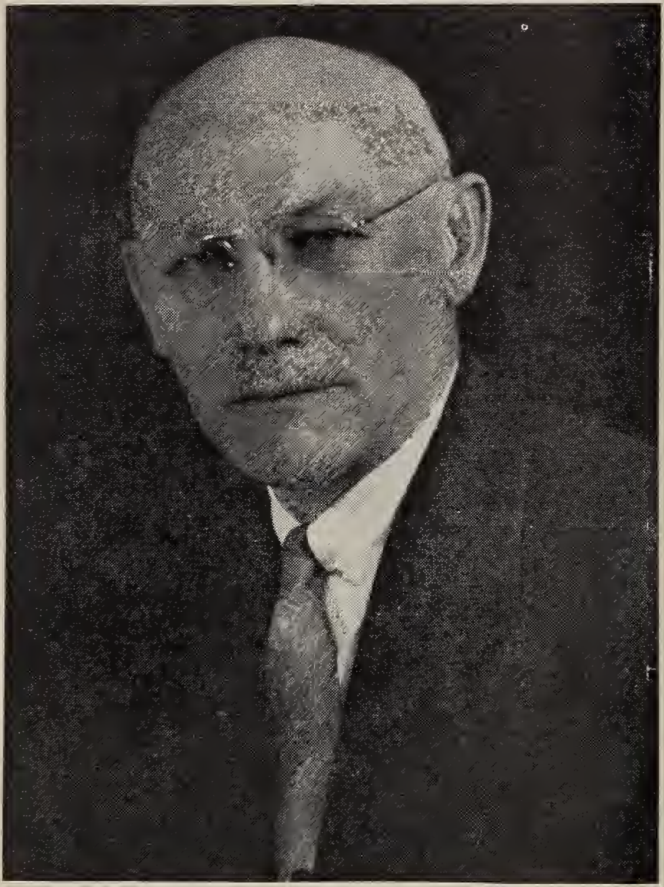
Guest Editorial

“Ethics Is Very Simple . . . ‘The Golden Rule’ ”

Elmer Hess, M.D., *President-Elect, A.M.A.*

As a man is in his heart so is he. In our opinion that statement defines just exactly what sort of person a man is whether he be of the learned professions or any other member of our modern society. If a man is good in his heart then he is an ethical member of any group in society; if bad in his heart he is an unethical member. To us, the ethics of medical practice is as simple at that. It has been our experience that most medical men firmly adhere to the fundamental principles which every decent physician believes, namely, that “A physician should be an upright man instructed in the Art of Healing.” We would like to substitute the word “must” instead of “should.” “He should (must) be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going as far as superstition, conducting himself with propriety in his profession and in all the actions of his life” (Hippocrates).



Elmer Hess, M.D.

“The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian dissensions. Disease and pain the sole conditions of its ministry, it is disquieted by no misgivings concerning the justice and honesty of its client’s cause; but dispenses its peculiar benefits without stint or scruple, to men of every country, and party and rank and religion and to men of no religion at all” (Code of Ethics).

These are the fundamental principles upon which the medical profession has developed and grown great and strong. There are no others. We have said nothing about money, fees, salaries, honorariums. We must care for the sick and infirm. Whether we receive a monetary reward or not is immaterial, but we can be assured that if we honestly are real practitioners of the Healing Art we will never starve. We have found out over many years of medical practice that the majority of our American people are honest and are desirous of paying a fair fee for a satisfactory service. The proof of this is the fact that the individual doctor is the most respected man in the community. He must live his ethics to warrant that respect. When a physician breaks that ethical code he is a traitor to his kind.

The back-bone of medical ethics is summed up in a short sentence: “Service to suffering humanity, period.” All the rulings and regulations that have been written to instruct a physician as to how he must conduct himself in his practice cannot be considered fundamentally as ethics but only as broad rules and regulations for his guidance. The practice of medicine is an individual personalized service but due to scientific knowledge based on research, many auxiliary agencies and personalities are involved. This association with other physicians, nurses, technicians and hospital personnel is necessary to furnish the most scientific medical care and is the reason for the establishment of certain rules and regulations concerning our conduct in this complex relationship. Ethics is very simple. It is the “Golden Rule.” Rules and regulations may be very complex and difficult of interpretation and usually are. In my opinion it would be difficult to be a good doctor without a firm belief in the Fatherhood of God and the Brotherhood of man. I believe that in the last analysis trying to live up to that philosophy constitutes all that is involved in the fundamental principles upon which medical ethics is founded.

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Missouri Academy of General Practice

William J. Shaw, M.D.

A recent meeting of the Board of Directors of the M.A.G.P. in Jefferson City was inspiring to members privileged to observe its development and growth. The evolution of new leaders and the smooth amalgamation of younger general practitioners with older members was striking.

Directors from St. Louis, Kansas City, Nevada and Bethany participated in the deliberations. Acting as members of an Advisory committee were the first and second presidents of the Missouri Academy. Dr. Bill Hendrickson, Poplar Bluff, newly appointed director to replace the late Dr. C. E. Bohrer, took an active part. Immediate past president, Kenneth Glover, Chairman of the Board, expeditiously moderated the meeting. President Wm. Wagenbach, President-elect Joe Getelson, Vice-president G. Stauffacher, Field Secretary Ray McIntyre, Secretary P. V. Siegel, Education committee chairman Jesse Rising and Membership committee chairman Preston Hall contributed to an excellent fact-finding, policy-making, and efficiently conducted meeting.

In addition to routine business, reports of standing and special committees, and evaluation of new applications for membership, plans were perfected for the annual meeting. An outstanding program for the Sixth Annual Assembly was prepared. Drs. Daniel Yancey, Springfield, and Jos. A. Hardy, St. Louis, will collaborate with a galaxy of nationally known physicians. E. Sinks McLarty, Galveston, an authority on preceptorships as preparation for general practice will discuss "Undergraduate and Postgraduate Medical Education." Dr. R. P. Pruitt, Mayo Clinic, sponsored by the Missouri Heart Association, and Dr. W. L. Watson, Cornell University, sponsored by the American Cancer Society, will join Dr. John G. Young, Clinical Professor of Pediatrics, South Western Medical School, Dallas, in filling out a well rounded clinical program. Mr. John Thornberry, Newscaster and Commentator, will entertain members and their wives at the annual banquet.

All ethical physicians in Missouri are invited, all general practitioners are urged, and all members of the Missouri Academy of General Practice are expected to attend the Sixth Annual Assembly of the Academy.

Remember: Jefferson City, October 27-28. Be there!

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

It's been mighty dry around these parts for the past two summers and now more often I hear "What's it going to cost me?" Lots of people are getting more price conscious as far as medical care is concerned. Seems to me a little more so than with the ordinary necessary commodities such as food, clothing and automobiles. There must be a reason.

Maybe it's just a happenstance but there sure has been a lot written in newspapers, magazines and a lot by innuendo in radio and TV stories. It's usually about the cost of medical care—the high cost of medical care and frequently those high doctor bills. Only last week I saw a TV story where the leading man committed embezzlement because of his wife's high doctor bills. Most often the doctor is the villain and nothing is said about the 36 to 45 bucks a day for special nurses, 15 to 25 a day hospital rooms or the drug, x-ray or lab bills.

And in the face of all this talk, justified or not, an attempt was made in San Francisco to make it unethical for a doctor to really do something about the situation. We have to admit that some docs do charge like they want eggs in their beer. Anyhow I think it's time we all took an objective look at the matter and try and find the answers to a few questions—and not forget the patients' point of view.

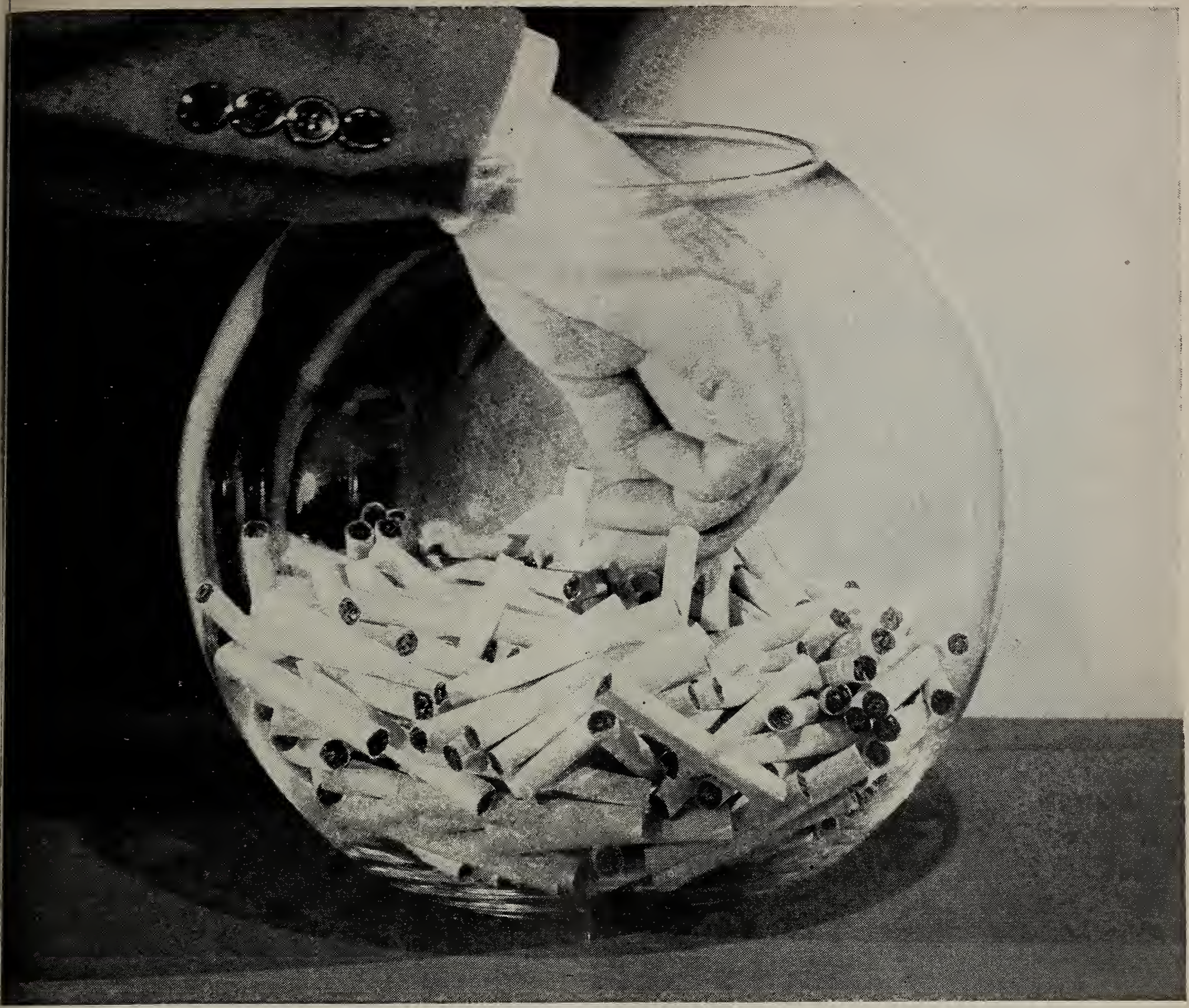
For instance, it doesn't take much brains—or common sense to figure out why my cousin in Oakland prefers Mr. Kaiser's plan. They are average working people. Her first baby cost her just about 500 dollars. The second a little over 16, thanks to Henry J.

Did you ever hear of a $50 circumcision job on an infant? My friends in Atlanta did. They happen to be well to do but they still resent such a fee.

Why is an appendectomy worth 100 to 300 dollars in the same city depending on the doctor and the patient? Don't you think the 300 dollar doctor would resent paying a scaled up fee for his haircuts or his coffee?

Why is a night call worth double a day call? Actually house calls interfere less with one's routine schedule when they are at other hours than office or hospital. I think now that few

(Continued on page 850)



Which filter-tip cigarette is the most effective?

In continuing and repeated impartial scientific tests, smoke from the new KENT consistently proves to have much less nicotine and tar than smoke from any other filter cigarette—old or new.

The reason is KENT's exclusive Micronite Filter.

This new filter is made of a filtering material so efficient it has been used to purify the air in atomic energy plants of microscopic impurities.

Adapted for use as a cigarette filter, it removes nicotine and tar particles as small as 2/10 of a micron.

And yet KENT's Micronite Filter, which removes a greater percentage of nicotine and tar than any other filter cigarette, lets through the full flavor of KENT's fine tobaccos.

Because so much evidence indicates KENT is the most effective filter-tip cigarette, shouldn't it be the choice of those who want the minimum of nicotine and tar in their cigarette smoke?

Kent with the exclusive Micronite Filter

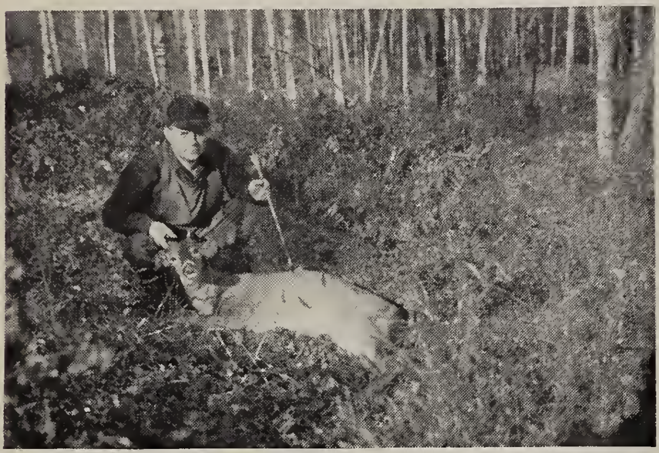
"KENT" AND "MICRONITE" ARE REGISTERED TRADEMARKS OF P. LORILLARD COMPANY

TWENTY
KENT
CIGARETTES
WITH THE MICRONITE FILTER

What Is Your Hobby, Doctor?

Bow Hunting

Frank H. Hodgson, M.D., *Kansas City, Missouri*



Spike-horn buck killed with bow and arrow.

More men and more animals have been killed with bow and arrow than by guns and bullets. This is an amazing but true statement published by some authority which may be a surprise to some who think the bow and arrow a children's toy specifically designed for the one purpose of stringing up eye balls.

Bow hunting is one of the fastest growing sports of today because it is basically sound. It is a sport in which all members of the family can participate at minimum expense. It enjoys longer special seasons because it is impossible to deplete the game by this method. It is one of the safest sports there is (for hunter and hunted). There have been no serious accidents in several hundred thousand man-days of hunting each year. Probably the greatest attraction to bow hunters is the sportsman-like challenge of putting the odds all in favor of the game and then trying to outwit them.

I feel it is imperative to comment on a standard criticism of bow hunting which always comes from the type of fellow who likes to make big noises with his mouth about something of which he knows little or nothing. This is the statement that this hunting is "inhumane," "too many cripples," "deer with arrows sticking out of them like porcupines." In many years of careful observation and investigation by many conservation departments it has been conclusively shown that this method is as humane as others—has fewer cripples and allows maximum hunting enjoyment with minimum game depletion.

Some eighteen years ago a bow and arrow was a relic and only used by a handful of hunters. Now, practically all states have special archery seasons and each year there is a rapid growth of new archery clubs. In California, the archery courses are comparable to a modern golf course. In Missouri this year have sprung up some eight new bow hunting clubs.

Most modern hunting bows are laminated glass that cost from $20.00 to $50.00 and last for many years. Hunting arrows cost $1.00 to $1.50 apiece and do not last as long. The bow must match the strength of the hunter and the arrow must match the bow. Given a bow and arrow to match a person and it is a rather easy manner to shoot creditably straight in a few hours of practice. The finer points of running shots, shooting clay pigeons and such take more practice.

The scope of game to hunt is indeed wide, ranging from the elephant (Howard Hill killed three elephants with four arrows), to rats and ground squirrels. The most popular game are rabbits and deer; the most unpopular is grizzly bear. There is practically no game that has not been killed with bow and arrow.

Of This and That

Mark M. Marks, M.D.

The other day I met a middle-aged man who was brown as an Indian and vigorous as a fellow twenty years younger. From his conversation I surmised that he had been well educated, for he seemed well informed on the affairs of the world and the local scene. From a mutual friend I later learned that he was a graduate in civil engineering but after twenty years he decided to become a ditch-digger. According to my informant, a darned good one, too. Now working by the sweat of his brow he still maintains his mental acumen and seemingly enjoys his freedom to do that which makes him happy.

Indeed it does take all kind of people.

"... the gastric secretion is the immediate agent of mucosal tissue digestion.... Opposed to this stands the defensive factor ... the two-component mucous barrier"[1] [*the protecting layer of mucus and the mucosal epithelium*].

Rotational gastroscopic views showing coating effect 1½ hours after administration of Amphojel.[2]

Causation – key to treatment in peptic ulcer

Through *topical* action alone, AMPHOJEL contends with the local causes of ulcer—aggressive acidity coupled with impairment of the wall defenses. Providing a dual approach, AMPHOJEL combines two aluminum hydroxide gels, one reactive, one demulcent. The reactive gel combats the attacking factor in ulcer by promptly buffering gastric acid. The demulcent gel promotes healing of the denuded mucosa by forming a viscous, protective coagulum.

AMPHOJEL—nonsystemic, nontoxic—provides time-proved *fundamental* therapy in peptic ulcer.

AMPHOJEL®

ALUMINUM HYDROXIDE GEL

Supplied: Liquid, bottles of 12 fluidounces
Tablets, 5 grain, boxes of 30, bottles of 100; and 10 grain, boxes of 60 and 1000

References: 1. Hollander, F.: Arch. Int. Med. *93:*107 (Jan.) 1954
2. Deutsch, E.: Scientific Exhibit, Gastroscopy, Interim Session A.M.A., St. Louis, December, 1953

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With Our Auxiliary

Mrs. W. E. Martin, *President*

Our Auxiliary is represented on the Missouri Committee on Careers in Nursing, through our State Nurse Recruitment chairman, Mrs. A. P. Stephan, Jefferson City. Other members and organizations on the committee are: Miss Mary Scholl, Missouri League of Nursing; Miss Marjorie Elmore, R.N., Ex. Sec., Missouri State Nurses Association; Mrs. Irene McCabe, Ex. Sec., Missouri Hospital Association; Mr. James Moss, Missouri Hospital Association; and Mr. Harry Dawdy, Missouri Division of American Cancer Society.

These five groups are sponsoring an intensive campaign for recruitment of nurses and other hospital personnel during the next few months. A booth was held at the State Fair in August at Sedalia. Students from various hospitals told interested persons of their work and schools. A display of caps, dolls and posters made up an attractive booth. Mrs. Stephan was chairman of the project, and members of our Auxiliary and the Nurses Associations were present at all times during the Fair.

October 11 to 16 has been proclaimed as National Nursing week—with a speaker's bureau, magazine articles, radio and TV scripts, newspaper publicity and displays in stores set up by the Missouri Committee for Careers.

High schools will be urged to plan a Careers Day to present nursing in general, rather than on an individual school basis. A number of scholarships and loan funds are available from our county auxiliaries to help financially where needed.

Dr. Walter Martin stated in his inaugural address at the A.M.A. meeting, "Advances in the science of medicine in all its branches have been accomplished by a corresponding expansion of hospitals, and it requires a constantly growing number of highly trained nurses and technicians to serve it."

We hope our activities may help relieve these hospital shortages and create an understanding of these by the public.

Capsule Clinics

Irving A. Wien, M.D.

- The final conclusions cannot be drawn from massive doses of Vitamin B_{12} in herpes zoster except to say it is encouraging at present and free from reactions. Leitch, G. B.: Northwest Med. **52** (April) 1953.

- Causes of death in front line surgical formations in Korea were attributed to: (1) unavoidable (too badly injured), (2) inadequate anesthesia, (3) slow surgery (*prima donna* technic), and (4) blood transfusion reactions. Egan, C. F.: Current Researches in Anesthesia & Analgesia **32** (March-April) 1953.

- Gastroscopy is extremely important in determining the origin of upper gastrointestinal bleeding. Polyps or other tumors may be too small or inaccessible to be seen by X-ray. Manson, T. J.: Southern Med. J. **46** (April) 1953.

- Prevention of uterine malignant disease involves: (1) good obstetrics, (2) correction of disease of the cervix, (3) complete hysterectomy when possible, (4) periodic pelvic examinations, (5) awareness of normal climacteric, and (6) a perpetual watchful attitude. Hahn, G. A.: J. Internat. Col. Surg. **19** (February) 1953.

- The iron of the tissues is divided into two categories: (1) that which is available for hemoglobin, and (2) a minimal amount that is conserved however great the reduction in hemoglobin. Joseph, H. W.: Medicine **32** (May) 1953.

- In order to prevent the occurrence of a marginal or stomal ulcer, no more than one fourth to one third of the stomach should remain after a gastric resection for a peptic ulcer. Marshall, S. F., and Lamphier, T. A.: Lahey Clin. Bull. **8** (July) 1953.

- Under the conditions of this community x-ray survey, it is shown that it is possible, from the appearance of the cardiovascular silhouette on 70 mm. chest photofluorograms, to select a group of persons whose subsequent experience demonstrates that their risk of dying from renocardiovascular causes is much greater than that of the rest of the surveyed population. Comstock, G. W.: New England J. Med. **248** (June 18) 1953.

- Primary malformation of the aortic orifice, either complete atresia or marked hypoplasia, is a rare cardiac anomaly. The malformation is usually compatible with life for only a few days. Brekke, V. G., and Park, H.: Am. Heart J. **45** (June) 1953.

"Taste Appeal" for the Low-Fat Low-Cholesterol Diet

Palatability is the key to planning this diet. And these flavor tips will help you keep in the "taste appeal" your patient must have and still keep out the rich foods he cannot have.

These are for flavor—

Cranberry and tomato sauce pinch-hit for gravy. Fruit juices are to baste with as well as to drink. And herbs and spices lend a fine aroma to meats and vegetables.

Here's where they go—

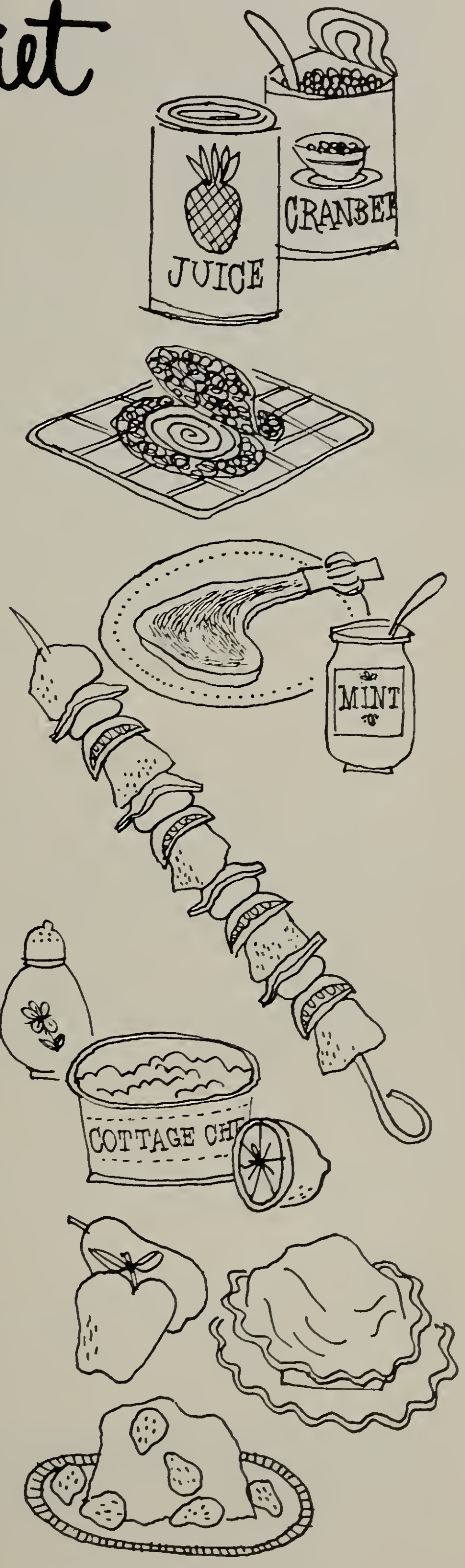
Meat loaf can sport a gay cap of whole-cranberry sauce, while hamburgers make a surprise party when a slice of pickle or onion is sealed between two thin patties. Your patient can baste chicken with lemon or orange juice—glaze lamb chops with mint jelly. Lean meats, broiled or baked, are made savory with herbs. And barbecued kabobs add something different.

Most vegetables can be dressed simply with lemon juice or an herb vinegar. And tomato halves come out from under the broiler bubbly with brown sugar and sweet basil on top.

On green salads, cottage cheese thinned with lemon juice, sparked with paprika, makes the dressing. And on fruits, try lemon juice, honey and chopped mint.

For dessert, angel cake or meringue shells go nicely under fruits—skim milk powder makes the "whipped cream." Snow pudding is a simple dessert—fresh fruit, even more so. And for a change, your patient may like his fruit baked in grape or cranberry juice.

The diet, of course, will be balanced nutritionally at a suitable calorie level. And these "diet do's" will help keep your patient happy within the limits you set for his diet.



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Fat—0; Calories 104/8 oz. glass (AVERAGE OF AMERICAN BEERS)

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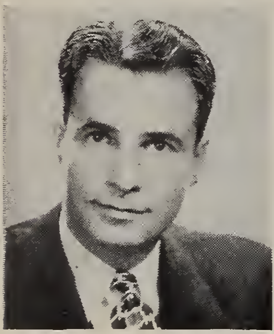
Missouri Medicine in Review

Leo H. Pollock, M.D.

OCTOBER, 1914

Dr. Ralph A. Kinsella has been appointed chief resident physician, City Hospital, St. Louis.



S. W. Newmaker, A.B., M.D., Philadelphia, "The Medical and Sanitary Inspection of Schools," feels teaching sex hygiene in schools is highly commendable.

Dr. Isadore Dyer, New Orleans, comments, "There is a tendency to discourage patients with pellagra, and to such an extent that in the popular mind pellagra is classed with plague. This should stop. Bad cases of pellagra die, so do bad cases of measles; ordinary cases of both get well. The patient should be told this."

The Government has indicted twenty advertising doctors in San Francisco for using the mails to defraud. Many Chinese "specialists" are included.

The State Board of Health Secretary has withdrawn Missouri from the registration area of the U. S. Census Bureau. Three cents per name (circa $1,200 per annum) has been paid for transcribing names from vital statistics department for the U. S. Census Bureau. The latter department wanted a responsible official to personally do this. The Census Bureau appointed its own transcriber, the secretary termed it "usurpation of federal authority," and made the withdrawal.

Mr. James Campbell has bequeathed about forty million dollars to St. Louis U. Medical School, payable twenty-one years after the death of his widow and daughter.

The *Annals of Surgery,* begun thirty years ago with 96 pages, has new dress and type changes.

OCTOBER, 1929

Dr. Joseph Colt Bloodgood states the cure of cancer today is an educational problem, essentially a public health problem.

An anonymous donor subscribed $150,000 to N. Y. Neurological Institute when board and trustees held a meeting to raise $150,000.

The Catholic Hospital Association has moved its general offices and editorial offices of *Hospital Progress,* its official organ, Chicago, to 1327 South Grand Boulevard, St. Louis. Reverend Father Alphonse M. Schwitalla is President, and Mr. M. R. Kneifl is Executive Secretary.

The new Lincoln School for Nurses in New York City is dedicated to "its high purpose for the advancement and progress of scientific medicine among the colored race." The principal speakers were Honorable James J. Walker, Mayor, and Dr. Linsley R. Williams, Director of the N. Y. Academy of Medicine.

Reverend Father Alphonse J. Schwitalla, Dean of the St. Louis U. School of Medicine, announced a full department of radiology, with Dr. LeRoy Sante as Director, and the division of the anatomy department into micro-anatomy, Dr. Albert Kuntz, and gross-anatomy, Dr. Daniel M. Schoemacker.

OCTOBER, 1944

Dr. Ernest Sachs, St. Louis, spoke at the Postgraduate Assembly on "Nervous and Mental Diseases, and War," sponsored by the Institute of Medicine of Chicago, at the Palmer House.

Dr. Robert Elman, St. Louis, is chairman of a committee cooperating with the State Board of Vocational Education.

Died while in military service, Ross Newman, M.D., Kansas City, aged 38, in Gardner General Hospital, Chicago.

Dr. Frank R. Bradley, St. Louis, is President of the American Council of Hospital Administrators.

The name, The Women's Field Army of the American Cancer Society, has been changed to "The Field Army" because men work in and are vitally concerned with the project.

Dr. George D. Kettelkamp, Koch, is President of the Missouri Chapter of the American Trudeau Society.

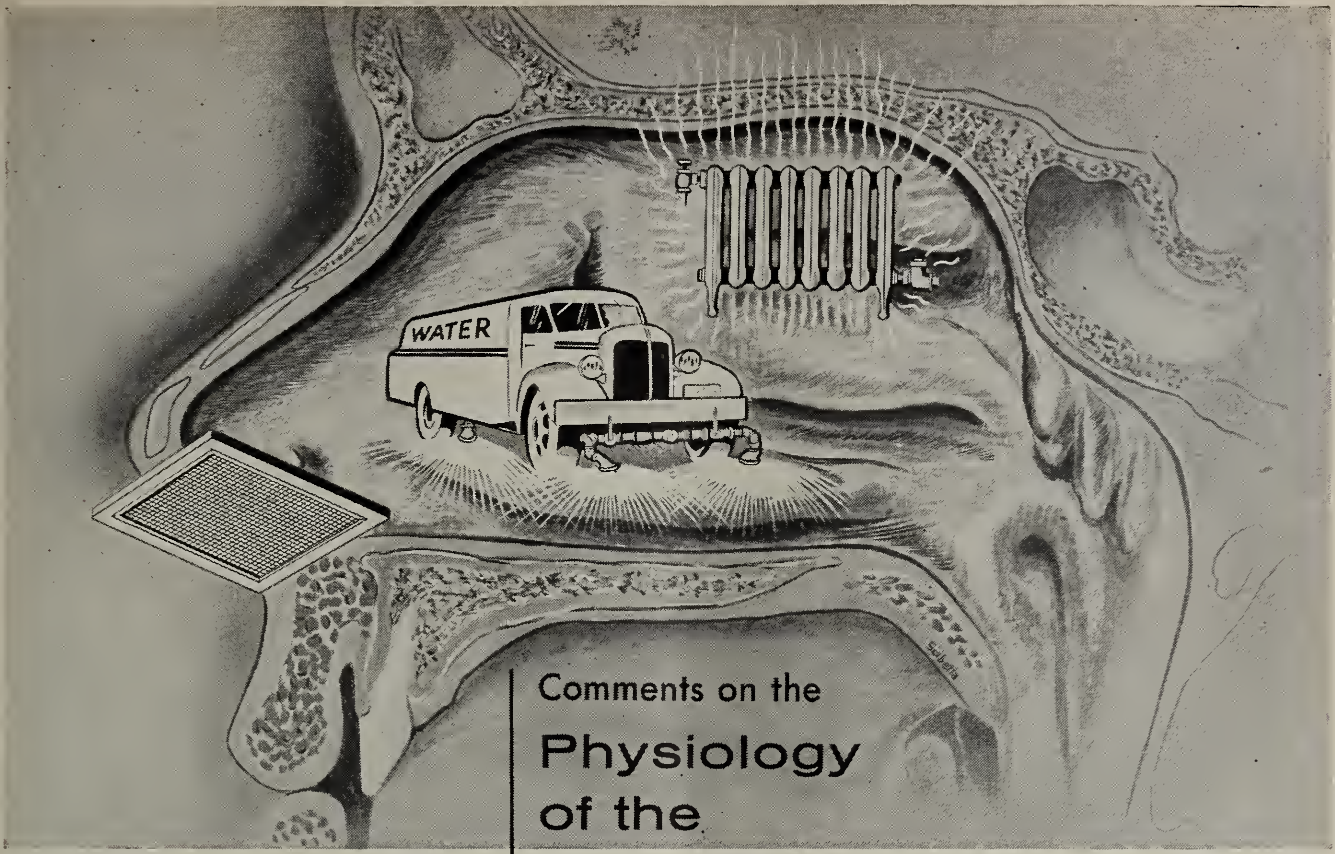
Missouri physicians who will appear at the American College of Chest Physicians, meeting jointly with the Southern Medical Association in St. Louis, are Drs. Evarts Graham and H. I. Spector, St. Louis, and Lt. Col. Brian B. Blades, Washington, D. C. Dr. Herbert L. Mantz, Kansas City, will preside at the Tuesday morning session.

Major F. I. Wilson, Kansas City, was awarded the Bronze Star for meritorious achievement at Ararae, New Guinea.

Dr. E. E. Glenn, Springfield, is the new President of the Missouri Tuberculosis Association, which met in Kansas City.

ESOPHAGEAL HIATUS HERNIA . . .

illustrates the occasional importance of this condition in the presence of repeated massive hemorrhage from the upper gastrointestinal tract. It demonstrated the necessity of carefully evaluating the clinical history in hemorrhage . . . in the presence of initially normal x-ray examination. The difficulty of identifying the hernia was shown even when this lesion was strongly suspected. . . .—Lucien W. Ide, M.D., and John R. McDaniel, M.D., St. Joseph, *American Journal of Digestive Diseases.*



Comments on the
Physiology
of the
Upper Respiratory
Tract

THE NASAL CAVITY:

The main functions of the nasal cavity are conditioning and exchanging air between the atmosphere and the lungs, as well as smelling. Gross impurities are removed by the fine nostril hairs, and finer impurities are enveloped in the mucous secretion of the intranasal lining and carried away by ciliary action. The air is warmed to a degree approaching body temperature and humidified. About 500 cc. of air are taken in during an ordinary inspiration, totaling 12,000,000 cc. daily.

In the common cold . . . when hypersecretion and mucosal swelling interfere with the normal aeration pattern, when abnormal mouth breathing is resorted to as a distress measure, relief can be obtained promptly with topical application of Neo-Synephrine hydrochloride. This potent vasoconstrictor is usually well tolerated – produces practically no sting or irritation on application to mucous membranes – even in infants.

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0.5% Solution
0.25% Solution (Aromatic)
1% Solution
0.5% Jelly
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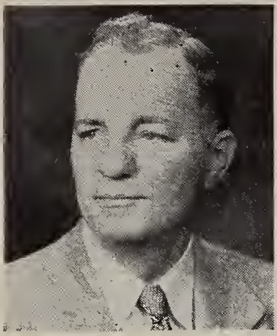
Nasal Spray
Plastic, unbreakable, leakproof squeeze bottle; delivers fine even mist.

Neo-Synephrine (brand of phenylephrine), trademark reg. U. S. Pat. Off.

President's Comments



Is it too early to mention our 1955 Annual Session? The meeting will be held in Kansas City Municipal Auditorium, March 27-30, 1955. It seems like we just finished our last one and yet six months have passed by.

The meeting will provide the best in scientific lectures plus colored television. The pharmaceutical firm of Smith, Kline & French of Philadelphia will again sponsor the colored television. This time the picture will come in on the new large screen bringing out clearly the fine detail of surgical procedure. The House of Delegates will again be faced with many problems affecting the private practice of medicine. Remember, it is your House of Delegates.

Hotel President will again be the hotel headquarters. May I suggest that it is not too early to send in your reservation.

Others Say

. . . The Wheat From the Chaff

It has often been said that doctors are the readingest people in the world—not necessarily cultural reading, but newspapers, magazines, digests, medical publications, case reports, textbooks and forecasts.

From the pens of hundreds of authorities, whose job it is to disseminate information, pour thousands of words per annum. Scientific publishing houses are bombarded with manuscripts. Organization bulletins are full of recommendations and informative words as to the benefits of the organization, lauding the group they represent. It usually all boils down to the fact that everybody's trying to convince somebody about something. All such information is valuable. But because so many different people spread the information, much of it is bound to be contradictory. . . .

. . . It all resolves itself into the fact that we still have to do much of our own thinking. We have to summarize the facts and then make our own decisions, with relation to what we believe, desire, and want, in the line of organizations benefits, medical knowledge, and general information.—*News & Views*, St. Louis Academy of General Practice.

It Works in Other States

Mississippi, as so many other states, including Missouri, needs more country doctors. So its Legislature appropriated $1,500,000 for the training of physicians who will practice in the rural areas. It does this by setting up a system of loans to qualified students, and . . . the plan has paid off to the tune of 400,000 hours of new rural medical service.

Under the plan, a student who professes a desire to become a doctor who will practice in the country, is granted a loan of $5,000 to cover four years of education. . . . He must promise to follow a general practice in the country for at least two years after completing his internship. . . . If he stays in the country in general practice for five years, the loan is canceled.

One reason why the new University of Missouri Medical School has been located at Columbia is to offer added incentive to graduate physicians to practice in the country. . . . The scholarship plan . . . is as yet not a part of the early program, but doubtless will be given consideration as the school develops.—Editorial, *St. Louis Globe-Democrat.*

Fair Questions

. . . Referring to the Report of the Committee for the Study of Relations between Osteopathy and Medicine (J.A.M.A. June 20, 1953):

1. Does this . . . action constitute formal recognition of Osteopathy as an allied profession?

2. Is it designed as a first step toward absorbing osteopathy . . . or merely a matter of expediency?

3. In what light does it place our Medical Heritage . . . what concessions from our Principles of Medical Ethics would be exacted?

4. Is it consistent with our . . . policy . . . which closed every Class B Medical School?

5. How will it affect the nationwide leadership and prestige of our organization . . .?

6. Does the committee . . . discriminate between a school which teaches . . . how to pass examinations and one which teaches . . . to skillfully and ethically practice medicine?

7. . . . Would it not be just as well to sufficiently lower our own standards of education to provide an additional 10,000 practitioners? Or perhaps . . . reopen a few Grade B schools to graduate men . . . for rural practice or house calls only?

8. Is the action in the best public interest and will it result in improved medical care for the people of this nation?—James H. Trolinger, M.D., Editorial, *Journal of the Cape Girardeau County Medical Society.*

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Vol. 51 October, 1954 Number 10

Problems in Surgery of the Gallbladder

ALFRED M. LARGE, M.D., *Detroit, Michigan*

Although many of the problems of gallbladder surgery have been solved since cholecystography was introduced some thirty years ago, it is likely that gallstones will continue to form as the years go by; and so long as patients are afflicted with gallstones it is also likely that controversial questions will continue to occur in the management of patients who have them. The purpose of this paper is to consider several of these problems.

THE SO-CALLED SILENT GALLSTONE

In a recent personal series of 125 consecutive private cases operated upon at Grace Hospital, Detroit, for gallbladder disease, there were five deaths. This figure is unusually high, because seriously ill cases and problem cases tend to be referred to my colleagues and myself, so that the census on our service does not mirror the hospital picture as a whole. One of the deaths was a 41 year old male patient who died of pulmonary embolism fourteen days following an uneventful cholecystectomy. This death was obviously not preventable and in itself represents a mortality of one in 121 cases or less than 1 per cent—an average risk for elective cholecystectomy in uncomplicated gallbladder disease. The other four cases were patients more than 65 years of age, all of whom had had symptoms of gallbladder disease for years. Three of them suffered from advanced biliary tract disease with complications and also had severe cardiac conditions, but all three voluntarily elected to accept the known high risk of operation rather than to continue suffering extreme distress. The fourth patient was moribund with peritonitis from perforation of the gallbladder when first seen and probably should not have been operated upon. It is common to see such patients as these four—patients who have been told over the years by their physicians not to be concerned about the finding of gallstones on routine cholecystography, since no symptoms seemed related to the presence of the stones at the time of examination—only to find a hopeless situation encountered in later years because of severe liver damage, severe acute cholecystitis or other complications. It would seem reasonable that these four lives could have been saved by earlier operation, before disabling biliary tract disease had developed.

In this same series of 125 cases, three patients with carcinoma of the gallbladder were encountered, an incidence of slightly less than 3 per cent. Two of the three cases were far advanced, no treatment was possible, and they are now dead. The third was a 56 year old woman who had had one mild attack of upper abdominal pain, who was found to have gallstones on x-ray, who had a cholecystectomy performed, and whose gallbladder wall on histologic examination revealed an early adenocarcinoma involving the mucosa only. She had remained well for two years.

Our own patients with gallstones thus show approximately a 3 per cent incidence of carcinoma of the gallbladder, and a somewhat higher incidence of mortality due to other complications of the gallstones. Although the series is quite small, it mirrors the experience of others surprisingly accurately and may be accepted as a fair average of recent reports appearing in the surgical literature.

Against such evidence is invariably quoted the fact that at autopsy some 10 per cent of patients are found to have gallstones which have been symptomless and have caused no trouble throughout life. The most careful and accurate autopsy figures that I have been able to obtain are those of Cook, Jones and associates, who recently have reported an incidence of 3 per cent of carcinoma of the gallbladder occurring in 231 consecutive autopsies on patients with gallstones, in cases carefully studied at the Hammersmith Hospital, London, England.[1] These workers have also reported that 12 per cent of the 231 patients found to have gallstones at autopsy died as a result of complications of the gallstones (table 1). The

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From the Department of Surgery of the Wayne University College of Medicine & The Grace Hospital, Detroit.

Read at the Annual Meeting of the Missouri State Medical Association, April 5, 1954.

cases were all studied in great detail and included the entire number of patients autopsied at this particular hospital during a ten year period. Surely an operative risk of less than 1 per cent—the standard figure for simple elective cholecystectomy—is to be preferred to a 3 per cent risk of carcinoma developing in the gallbladder containing stones, and is much to be preferred to an even greater risk of death from the other complications which are likely to occur in the presence of gallstones.

TABLE 1

Hammersmith Hospital, London, England
1941-1950

Total autopsies (less still births)	2882
Number with gallstones	231 (8%)
Carcinoma of gallbladder (3% of cases with gallstones)	6
Death due to gallstones (12% of those with gallstones)	30 cases

Thus the answer to the problem of the silent gallstone, in my opinion, is that silent stones tend to cause trouble as the years go by, that acute cholecystitis, stone in the common bile duct and liver damage are likely to supervene, as in the four deaths that were cited; that pre-existing heart disease may be aggravated; that carcinoma occurs in an appreciable number of cases, and that the only sure way to get rid of such trouble is to remove the gallbladder before any irreparable damage has been done.

ACUTE CHOLECYSTITIS

Another problem which remains controversial in patients with gallbladder disease is the timing of operation in the treatment of acute cholecystitis. Should one operate early or late? A great deal of work has been done and a great many papers have been written to favor one or the other view, but the problem remains unsolved. Without reviewing in detail any of the pros and cons of early and late operation, I would like simply to state that we have tried both plans and have found a sort of compromise, which we have chosen to call the "delayed emergency operation," to be quite satisfactory. By this, I mean that patients are studied carefully for hours or even days and given the most intensive supportive therapy including antibiotics, antispasmodics and intravenous fluids, as well as intestinal decompression, if indicated by the presence of ileus. Should the patient appear to be improving during the period of observation, the acute process is allowed to subside for ten to fourteen days and cholecystectomy then performed. Should the patient fail to improve or become worse during the first few hours after admission, operation is performed immediately, and we do not hesitate to do a cholecystostomy under such circumstances if the patient is critically ill or if cholecystectomy appears difficult or unduly hazardous. By following this plan, both in our own cases and in those seen at the teaching hospitals of the Wayne University College of Medicine, it is our feeling that we have kept the mortality to as low a level as possible, have reduced the number of operations done under a wrong diagnosis to a minimum and, perhaps most important of all, have avoided common duct injuries which might otherwise have occurred. The one death in this group was the patient who was moribund with general peritonitis on admission to the hospital. Without doubt the free and abundant use of antibiotics has been of great importance in the avoidance of fatal complications in many of these acute cases and has weighed heavily in helping us to decide upon the urgency of operation.

DUCT RECONSTRUCTION

It is now fairly generally accepted that one of the unfortunate results of early emergency operation for acute cholecystitis has been a frightful increase in the incidence of common duct injury, a tragedy which seems to be occurring everywhere throughout the country. It is obvious that duct injury is much more likely to occur in the inflamed edematous tissues of acute cholecystitis than in the less inflamed tissues encountered during a simple interval operation for chronic cholecystitis. It is equally obvious that the immediate repair of such an injury may be well nigh technically impossible in the acutely inflamed or swollen tissues associated with acute cholecystitis. If, however, during elective operation, the duct injury is recognized when it occurs and immediate repair with good anatomic approximation of the duct ends is performed, an excellent and permanent result can be anticipated. On the other hand, the results of late treatment, weeks and months after injury, when stricture and scarring are extreme, are at best only partly satisfactory.

There are three more or less standard methods of duct reconstruction, namely duct-to-duct anastomosis, anastomosis of the duct to the duodenum, and anastomosis of the duct to a long blind Roux-Y loop of jejunum (fig. 1). Over the last three years, experiments have been performed in our laboratory to try to assess the efficacy of these various methods of duct reconstruction.[2] In these experiments, the gallbladder has usually been left in place, to act as a sort of index of the degree of regurgitation infection. Stasis should occur in the gallbladder and if infection is present, the gallbladder therefore ought to act as a convenient indicator of the degree and severity of such infection. Using dogs as experimental animals, the common duct was obstructed for two weeks, and the three types of duct reconstruction mentioned were then performed (fig. 2). No infection occurred when the sphincter of Oddi was preserved; the animals recovered well and remained normal in all respects. These animals thus served

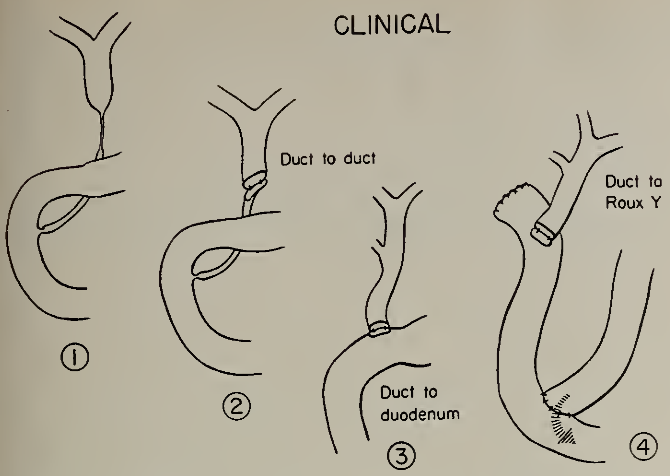

Fig. 1. Diagrams to show: (1) Stricture of common bile duct. (2) (3) & (4) methods of repair. Duct-to-duct or duct-to-duodenum repair are preferred both on clinical and experimental grounds.

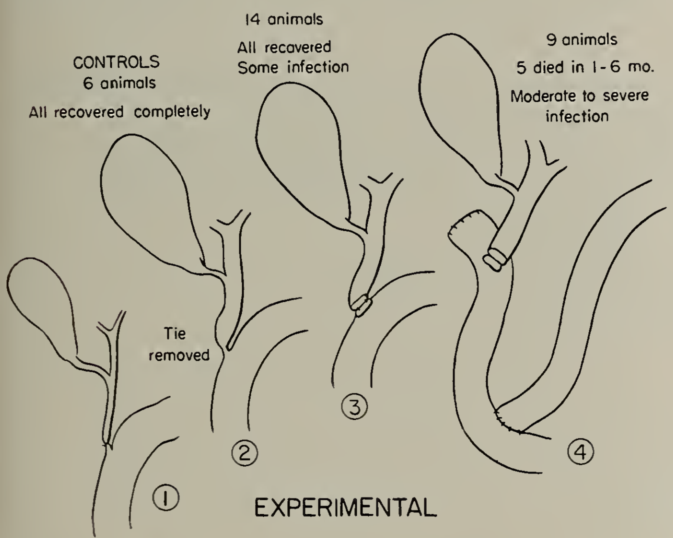

Fig. 2. Diagrams to indicate the results of the various types of experimental restoration of biliary-intestinal continuity following obstruction of the common bile duct for a period of two weeks.

as controls. Both the duct-to-duodenum and the Roux-Y animals developed ascending cholangitis, but we were surprised to find that the choledochoduodenal animals did much better than did the Roux-Y animals, that the Roux-Y group developed more severe infection and suffered a much greater mortality; and, furthermore, that the ascending infection was always much more marked in the gallbladder itself and seemed to improve with removal of that organ. As far as we have been able to determine, this work, in which the gallbladder is used to act as an indicator of the degree of ascending infection, constitutes the first well controlled experimental study in which statistically significant differences in results are reported between the various types of common bile duct reconstruction. Thus, on the basis of these experiments alone, it would appear that duct-to-duct anastomosis is best, that when this method of reconstruction is impossible, choledochoduodenal anastomosis would constitute a simple and sound method of duct reconstruction, and that this method should be preferred to the more complicated blind loop Roux-Y cholecystenterostomy.

Corroborative evidence favoring the view that an opening between the bile duct and duodenum is not as a rule accompanied by disabling ascending infection is to be found in three groups of patients. (a) Those individuals who have had complete severance of the sphincter of Oddi for chronic pancreatitis, as advocated by Doubilet and Mulholland[3] and others, do not tend to develop ascending cholangitis to a recognizable degree. A sufficient number of these patients has now been followed over a period of several years to justify this statement. (b) Occasionally patients are seen who have spontaneously developed a choledochoduodenal fistula as a result of penetration of a duodenal ulcer through the wall of the bile duct, the fistula being diagnosed by passage of barium up the biliary tree on routine gastrointestinal x-ray. We have recently studied and reported three such patients, and have found little if any definite evidence of ascending cholangitis upon exploration in any of them.[4] (c) Finally, and most important, a number of surgeons, including Walters[5] and others, have advocated choledochoduodenal anastomosis as the proper method for duct reconstruction in patients with stricture of the common bile duct for a good many years, and have followed large numbers of patients so treated for a long time with excellent results. Our own less extensive clinical experience coincides with their findings.

The other interesting result of our experiments relates to the presence of infection in the gallbladder in all the experimental animals, and indeed to the fact that infection is more marked in the gallbladder than in the liver or bile ducts. On the basis of this observation it would seem reasonable to recommend that, whenever a wide opening is made between the bile ducts and the intestinal tract, the gallbladder ought to be removed whether or not it is abnormal.

SUMMARY

Silent gallstones sooner or later are likely to cause trouble and should be treated by cholecystectomy. Cholecystitis, common duct stone, liver damage and carcinoma of the gallbladder are likely to develop and together constitute a much greater risk to the patient than does elective cholecystectomy. These facts are clearly borne out by autopsy as well as by clinical statistics.

Acute cholecystitis may properly be treated by delayed emergency operation so that the acute process is allowed to subside somewhat before operation is performed.

Experimental and clinical evidence indicates that stricture of the bile ducts had best be treated by suture of the severed ends of the duct whenever possible, with preservation of the sphincter of Oddi. If the distal end of the duct cannot be used, direct anastomosis of the dilated common bile duct or hepatic duct to the side of the duodenum is the procedure of choice. Whenever a wide opening is made between the bile ducts and the intestine, the gallbladder, normal or abnormal, ought to be removed.

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AN INCREASING PROBLEM

The surgical relief of intractable pain is assuming a more prominent position in neurosurgical practice. Whether this is due to an increase in malignant diseases or to an appreciation by physicians that some neurosurgical procedures are effective cannot be stated with certainty. The fact remains that more and more frequently the neurosurgeon is called upon to evaluate and treat these problems.

In the past, the thoracic chordotomy has been the procedure of choice for pain below the costal margin. . . .

. . . a series of twelve successful cases of bilateral cervical chordotomy at the first and second cervical levels are presented . . . operative mortality has been zero . . . analgesic levels and the relief of pain have appeared to be better maintained than with other procedures.—George E. Roulhac, M.D., St. Louis, *Surgery.*

INTRATHORACIC GOITER

. . . gentleness is essential throughout the operation. It lessens the possibility of deep hemorrhage from adhesions to deep vascular structures and reduces the possibility of tracheal compression, angulation or perforation. After removal of the tumor the trachea returns to its normal position.

Maintenance of the contour and continuity of the trachea, control of hemorrhage and preservation of the recurrent laryngeal nerve are essential in all thyroid surgery. Forceful and hurried delivery of the gland into the field of operation may lead to a serious complication. Adequate exposure and anatomic dissection under direct vision are essential in order to minimize the danger of a surgical tragedy.—Claude J. Hunt, M.D., Kansas City, Editorial, *American Journal of Surgery.*

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Subacute Bacterial Endocarditis

EARL L. LOYD, M.D., *Jeffserson City*

With the development of antibiotic drugs, the early recognition and treatment of subacute bacterial endocarditis has assumed greater importance. Prior to ten years ago the disease was almost of academic interest since there was no known effective treatment. The mortality rate at that time was about 97 per cent. With current therapeutic methods this has been reduced to approximately 30 per cent. For proper application of these methods, however, it is essential that the clinician have a basic understanding of the disease and a working knowledge of the principles of antibiotic therapy. It is the purpose of this paper to review the etiology, pathology, clinical features and laboratory findings of subacute bacterial endocarditis and to discuss the present concepts of treatment.

Etiology—The nonhemolytic streptococci are responsible for subacute bacterial endocarditis in more than 90 per cent of cases. This group includes a number of species, the most common of which are Streptococcus salivarius, Streptococcus mitis and Streptococcus faecalis. Other bacteria known to cause the infection are H. influenzae, E. coli, gonococcus, staphylococcus and B. abortus.

In the majority of cases, valvular heart disease exists prior to the development of subacute bacterial endocarditis. Rheumatic heart disease is present in from 80 to 90 per cent of cases and congenital heart disease in 10 per cent. The important lesions of the latter group are patent ductus arteriosus, ventricular septal defect and bicuspid aortic valve. Occasionally coarctation of the aorta is the site of the infection in which case the disease is called subacute bacterial endarteritis.

Pathology—The important pathologic lesion is the vegetations that form along the line of closure of the valves. The mitral valve is affected in 40 per cent of the cases, the aortic in 10 per cent and the mitral and aortic together in 38 per cent. The other 12 per cent involve the pulmonary and tricuspid valves. The vegetation consist of three layers: a central necrotic core and two layers of bacterial colonies surrounding this core, both layers covered by fibrin and platelets. This is significant from a therapeutic standpoint because it is the fibrin and platelets that make penetration of the vegetation by the antibiotics difficult. It is well known that bacteria grow readily in fibrin, but it is not generally appreciated that antibiotics have difficulty in diffusing into fibrin clots. However, if such clots containing microorganisms are subjected to high enough concentrations of antibiotics over a sufficient period of time, death of the organisms will usually result. It is for this reason that large and frequently tremendous doses of antibiotics must be given for prolonged periods of time before the offending microorganism causing subacute bacterial endocarditis can be eradicated. In this connection Keefer has made the interesting observation that microorganisms of the same in vitro sensitivity to penicillin may react differently to penicillin when present in fibrin clots.[1] Thus, it is more difficult to kill sensitive Streptococcus viridans in a fibrin clot than other equally sensitive organisms.

One of the features of the endocardial lesions in subacute bacterial endocarditis is their tendency to extend from the valve to the mural endocardium. When this extension involves the chordae tendineae, rupture of one of these structures may occur. The myocardium, too, may become involved. Perry has stated that myocardial lesions could be found in a high proportion of cases if sufficient sections were obtained from the myocardium.[2] These lesions are in the form of miliary infarcts. Other myocardial lesions are interstitial and perivascular infiltrates. These lesions undoubtedly contribute to the myocardial failure frequently observed in patients suffering from subacute bacterial endocarditis.

Embolic lesions may be found in a number of organs. Infarcts of the spleen are common. Minute emboli to the kidney producing the so-called "flea-bitten kidney" may occur. Emboli to the brain are not uncommon. Occasionally mycotic aneurysms are produced by the breaking off of an infected vegetation from the heart valve and lodging in the lumen of an artery. The chief vessels involved when this complication occurs are the cerebral vessels, superior mesenteric, femoral, central artery of the retina and, occasionally, the aorta.

Clinical Manifestations—In the early stages of subacute bacterial endocarditis, there are no pathognomonic symptoms or signs. The clinical picture is one of toxicity. The patient may complain of weakness, lassitude and malaise. Loss of appetite with its resultant weight loss occurs. If the patient or clinician takes the trouble to check the temperature, a low grade fever is usually noted.

As the disease progresses, embolic phenomenon may make their appearance. Blood in the urine may be observed. Sudden blindness in one eye from sudden closure of the central retinal artery may occur. Frequently, pain is noted in the left upper quadrant of the abdomen due to splenic infarction. Rarely, the initial symptom of the disease is a sudden chill. Physical examination reveals pallor of the skin. A heart murmur is

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nearly always present. Its absence should make one skeptical of a diagnosis of subacute bacterial endocarditis. A murmur that changes in character from day to day should alert the clinician to the possibility of subacute bacterial endocarditis, particularly if the patient has fever. A palpable spleen is often a cardinal sign. Petechiae should be searched for. Splinter hemorrhages under the nails are a frequent occurrence. Examination of the ocular fundi may reveal linear hemorrhages. There may be painful cutaneous nodules in the fingers and toes—the so-called Oslers nodes.

In the untreated patient, the course of the disease is progressively downhill to a fatal termination. Heart failure, cerebral embolism, progressive anemia, ruptured mycotic aneurysm and overwhelming sepsis are the usual causes of death.

Laboratory Findings—The final diagnosis of subacute bacterial endocarditis rests on the isolation of the offending microorganism from the blood stream. Repeated blood cultures should be obtained from any patient with a heart murmur who has a fever of more than a few days duration. Unless the patient's condition is critical, blood cultures should be obtained prior to the administration of antibiotics. A positive blood culture not only supports the diagnosis of subacute bacterial endocarditis, but permits antibiotic sensitivity studies against the offending microorganism. When antibiotics are given before blood is drawn for cultures, there may be difficulty in the subsequent selection of the appropriate antibiotic drug. It should be emphasized that antibiotics may be present in such concentrations in the blood stream as to inhibit bacterial growth, but not in a concentration sufficient to be bactericidal. As Hunter has pointed out, direct killing of the offending microorganism is necessary if treatment of bacterial endocarditis is to be successful.[3]

Anemia is the most common hematologic abnormality observed in this disease. This is generally of the hypochromic type and frequently to a marked degree. The leukocyte count is normal or increased. "Toxic" changes in the granulocytes are often present. An occasional but highly diagnostic finding in the peripheral blood smear is the presence of large reticuloendothelial-like cells which have engulfed erythrocytes and nuclear debris of leukocytes in the cytoplasm. Parsons has recently described a case of subacute bacterial endocarditis in which pancytopenia occurred.[4] This was attributed to toxic suppression of the bone marrow. He has also pointed out that the association of a cardiac murmur and an unexplained anemia or of an unexplained fever and anemia should suggest the possibility of bacterial endocarditis.[5]

Diagnosis—Subacute bacterial endocarditis should be suspected in any patient with a heart murmur who has a fever of more than a few days duration. The presence of petechiae, palpable spleen, anemia and hematuria give additional support to the diagnosis. Diseases that must be considered in the differential diagnosis are acute rheumatic fever, brucellosis, tuberculosis, malaria, lymphomas and other malignancies. Appropriate studies will usually exclude these conditions. Occasionally a coexistent infection will occur with bacterial endocarditis. One of my patients, a 9 year old girl, had both acute rheumatic fever and subacute bacterial endocarditis. The former condition was suspected when, after the blood cultures had become negative during treatment with antibiotics, she developed a pericardial friction rub and arthralgia which responded to salicylates. Although she recovered, she was left with a severely damaged heart.

In the suspected case of subacute bacterial endocarditis, it is the positive blood culture that affords proof of the diagnosis. It should be repeated again that, if at all possible, blood for cultures should be obtained prior to treatment.

Treatment—In most cases, successful treatment depends on the isolation of the causative organism and its sensitivity to antibiotics. A knowledge of bacterial sensitivity tests is therefore useful in the selection of the appropriate antibiotic.

Various methods are available to determine this sensitivity. In the larger hospital laboratories, the plate dilution test is probably the most widely used. This method consists of a series of blood agar plates in which dilutions of an antibiotic are incorporated, together with a control plate containing no antibiotic. Freshly grown cultures of the organism in question are streaked on these plates. The plates are inspected for bacterial growth after sixteen hours of incubation or whenever organisms have grown well on the plate containing no antibiotic. A record is made of the lowest concentration of antibiotic at which macroscopic growth of each organism is completely inhibited. In the smaller hospitals, the disk method is quite satisfactory for routine purposes. In this method blood agar plates are inoculated with a uniform suspension of the causative organism. Disks impregnated with antibiotic solutions of the desired concentrations are placed on the surface of the blood agar plates. The antibiotic sensitivity is determined after a suitable incubation period by observing the zones of inhibition produced in the areas immediately surrounding the disks. The antibiotic showing the greatest inhibition is the one preferred for treatment.

Since most cases of subacute bacterial endocarditis are caused by Streptococcus salivarius, and Streptococcus mitis, both of which are sensitive to penicillin, this is the antibiotic of choice. Streptococcus faecalis is usually relatively resistant to penicillin but occasionally a satisfactory clinical result will occur when large doses of this antibiotic are used. This type of infection will usually respond better, however, to a combination of both penicillin and dihydrostreptomycin. In patients in whom the causative organism is either Streptococcus salivarius or Streptococcus mitis which are sensitive to 0.1 unit or less of penicillin per cc. of culture media, the usual dose of penicillin is 1 to 2 million units daily. If the endocarditis is due to Streptococcus faecalis the average maximal dose of penicillin is 5 to 10 million units daily, and of dihydrostreptomycin 0.5 to 1 gram morning and evening. No definite statement can be made regarding duration of treatment. Until recently, four to six weeks was considered a minimum period of time provided repeated blood cultures were negative.

Hunter has obtained satisfactory results with combined therapy of penicillin and streptomycin for only two weeks in those cases in which the causative organism was Streptococcus salivarius or Streptococcus mitis.[6] More recently, Geraci and Martin have reported excellent results using 1 million units of aqueous procaine penicillin G. and 1 gram dihydrostreptomycin sulfate I.M. every twelve hours for two weeks in cases of endocarditis caused by penicillin sensitive streptococci.[7] From the economic standpoint, this short term treatment is a real advantage. In treating infections due to more penicillin resistant microorganisms, the continuous intravenous drip of penicillin is the method of choice. Ten to 20 million units daily may be administered by this route. A polyethylene tube may be inserted in a vein for as long as two weeks without changing. Heparin in doses of 25 to 50 mg. may be added to a liter of solution containing the penicillin to prevent venous thrombosis at the site of infection. As implied earlier, infection due to Streptococcus faecalis generally requires prolonged treatment with large doses of penicillin and dihydrostreptomycin. The continuous intravenous drip is the preferred method of administration of penicillin in this type of infection. The dihydrostreptomycin is of course given intramuscularly.

There are now numerous case reports in which other antibiotics—aureomycin, terramycin, chloramphemicol—either alone or in combination with penicillin or dihydrostreptomycin, have been successfully used in the treatment of subacute bacterial endocarditis. In the resistant case, reliance must be placed on sensitivity studies for selection of the appropriate antibiotic drug. In subacute bacterial endocarditis due to a patent ductus arteriosus, surgical legation is necessary. If the causative organism is sensitive, antibiotics should be given prior to surgery. In a few instances, however, surgical legation is necessary before the blood stream can be sterilized with antibiotic drugs.

A final word should be said about prophylactic treatment. Such treatment is indicated in all patients with rheumatic or congenital heart disease. Any operative procedure, especially dental extractions, tonsillectomy, cystoscopies or prostatectomy, is likely to produce a transient bacteremia, which in turn may lead to endocarditis in patients with valvular heart disease. This can be prevented in most instances, however, by the preoperative and postoperative administrations of penicillin. The usual dose is 600,000 units intramuscularly the day prior to surgery, the day of surgery and for one or two days following surgery. Aureomycin is also effective in preventing bacteremia following surgical procedures. The usual dose is 2 grams the day before, the day of and the day following surgery. Since about 25 per cent of the cases of subacute bacterial endocarditis develop following some surgical procedure, the value of such prophylactic therapy becomes apparent.

Any discussion of subacute bacterial endocarditis would be incomplete without mentioning some of the causes of treatment failures. Probably the chief reason is a delay in diagnosis. It may be possible to eradicate the infection in the later stages of the disease, but irreparable damage to the heart valves may have already occurred, producing intractable heart failure. There are still a number of cases caused by microorganisms extremely resistant to all antibiotics. Endocarditis due to E. coli is such an example. Finally, treatment failure may be due to inadequate doses of antibiotics. There are a number of cases on record in which 15 to 30 million units of penicillin daily were required before a cure was effected. Occasionally a case will be encountered in which the causative organism is eradicated but a reinfection due to another and different microorganism occurs.

In conclusion, it can be said that real progress has been made during the last ten years in the treatment of subacute bacterial endocarditis. One must not lose sight of the fact, however, that the mortality rate is still excessive. Perhaps as new antibiotics are developed and clinicians become more aware of the disease, particularly in its early stages, a further reduction in the mortality rate will occur.

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Pikers!

. . . Every established M.D. ought to give something to this (A.M.A. sponsored fund for medical schools) fund. Many don't. In one year the osteopaths, with far fewer teaching schools, raised 2½ million dollars for their schools.—W. Clarke Wescoe, M.D., Speech at K.C.A.G.P.

Natal Day Deaths

Hematogenic Shock as a Possible Etiologic Factor

DANIEL B. LANDAU, M.D., *Hannibal, Missouri*

Despite considerable attention to the newborn infant and better understanding of the physiology of the newborn infant, there has been but a slight decline in natal day infant mortality.

Bundesen[1] in his comparison of Chicago neonatal death rates in 1912 and 1952 states that during the last forty years there has been practically no reduction in the mortality rate during the first day of life. In 1912, the rate for the first day of life was 11.1 per thousand live births. By 1952, the natal day death rate was 9.4, a reduction of less than two for every thousand live births.

He states that all prematurely born infants, irrespective of weight, account for only 8.1 per cent of all live births, but they account for 79.1 per cent of all natal day deaths. Of these deaths under one day 54.3 per cent are caused by abnormal pulmonary ventilation.[1]

It is, therefore, of great importance to devote attention to the causes of death during the first day of life. It is possible that a fresh approach to the problem of natal day deaths is necessary.

Since the onset of symptoms in the infants who die of abnormal pulmonary ventilation takes place from within a few minutes following birth to several hours later, it would be well to consider the effect of the change from placental to alveolar oxygenation as a possible contributing factor.

On considering the situation at the placenta, Eastman[2] has pointed out that there is high unsaturation of fetal blood in respect to oxygen. Expressing it as the percentage of the total amount of oxygen with which the blood will combine or percentage saturation, maternal arterial blood is usually 96 per cent saturated and the maternal venous blood is 71 per cent saturated. The arterial blood going to the fetus in utero is only 63 per cent saturated and falls at birth to 50 per cent saturation. This low oxygen tension to which the umbilical blood is exposed explains the high hemoglobin content of this blood. It is analagous, Eastman states, to the usual response of adult blood to low oxygen tension, as in high altitudes, with an increase in the number of erythrocytes and in the amount of hemoglobin.

Since in many instances of abnormal pulmonary ventilation the onset of symptoms soon follows the shift from placental to pulmonary respiration, is it not logical to look to some deviation from the normal in this change-over as a possible cause? A frequently occurring deviation from the normal is early separation of the infant from its placental blood supply, which rapidly hastens the decline in erythrocyte and hemoglobin values; normally, the decreases in these values occur over a period of days. If the infant is rapidly deprived of, or loses a considerable amount of, the placental and umbilical vessel blood, it is conceivable that his suddenly decreased blood volume can rapidly sink to a critically low value and shock may develop as it does in an older individual who has lost a considerable amount of blood from a gunshot wound or from a traumatic amputation and who has a low blood volume therefrom. De Marsh[3] et al state that the placental blood normally belongs to the infant and his failure to get this blood is equivalent to submitting him to a rather severe hemorrhage.

Emphasis heretofore has been on the importance of aspiration as a cause of the abnormal pulmonary findings as shown by Gellis, White and Pfeffer's[4] advocating gastric suction of cesarean infants and also by Russ and Strong's[5] intratracheal catheterization technic for cesarean infants. In "Hospital Care of Newborn Infants,"[6] it is stressed that a suction bulb or a mechanical suction device may be necessary for gentle aspiration of the pharynx and that a rigid catheter occasionally may be needed for aspiration of the trachea in severely asphixiated infants.

Clifford[7] states that it may take several hours for the full blown picture of severe respiratory distress to develop in the newborn infant. He advises that all infants should be watched closely and, at the first sign of possible respiratory trouble, treatment should be instituted. There are certain situations wherein this syndrome is prone to develop in the newborn infant; after cesarean section, after a difficult delivery, in cases of intrauterine anoxia, and in cases in which the infants were delivered of diabetic mothers or prematurely (in which case treatment should be instituted at birth). He further advises that the air passage should be cleared of fluid by postural drainage and gentle suction. The stomach should be aspirated of its fluid content and the infant placed in an atmosphere of 40 to 50 per cent oxygen with high humidity through water fog or mist added to the atmosphere of the incubator, with or without a wetting agent. Antibiotics and chemotherapy are used. Thus, Clifford sums up the present methods of treatment of these infants.

It is universally agreed that the prevention of aspiration of amniotic fluid and other foreign material such as blood is most important. Everything possible to prevent aspiration should be done.

It is easily understood why the pulmonary findings, clinically, radiologically and pathologically have been stressed as lung changes are often demonstrable by all three methods if the infant survives for a few hours. The lung findings are especially easily demonstrable pathologically. As a new approach to the problem, the possibility exists that these lung findings are not the primary lesion. Can it be that the lung changes are secondary to hematogenic shock or low blood volume shock? Shock as it represents functional changes in the blood vessels is not as readily shown pathologically as are the lung changes; this might explain why it has not been considered as a causative factor in newborn infant symptomatology.

For many years, the importance of placental blood to the fetus has been discussed in the medical literature with divergent opinions.

Smith[8] states that Budin in 1876 and Schucking in 1877 showed that about 90 cc. of blood flowed to the infant from the placenta during the third stage of labor.

Engel, in 1855, quoted by De Marsh[3] et al, reported twice as great a mortality in premature infants whose cords were tied early as in those whose cords were tied late. De Marsh et al also state that the placenta contains a greater proportion of the fetal-placental blood volume in premature infants.

Ballentine's[9] studies of delayed clamping of the umbilical cord until cessation of pulsations showed an average increase of 96 cc. of blood to the newly born infant.

De Marsh, Windle and Alt[10] found that immediate clamping of the umbilical cord of the newborn infant deprives the infant of 107 cc. (average) of blood. They found that the blood volume of those infants allowed to receive the placental and umbilical vessel blood was 361 cc. or 11.8 per cent of the body weight, in contrast with 301 cc. or 9.6 per cent of the body weight in the infant whose cord was cut immediately. They estimate that more than 26 per cent, but less than 34 per cent, of the average total fetal blood is in the placenta and umbilical vessels at the end of fetal life.

Under normal conditions of birth, most of this blood passes to the newborn infant while the uterus is contracting on the placenta during the third stage of labor. They found that the difference in blood volume according to the time the cord is clamped, becomes a difference principally in red cell mass, the plasma volume being equalized by rapid adjustment of extracellular fluid. They found considerable differences in the hematocrit determinations, reporting 53 per cent on the first day and 51 per cent on the third day in those infants deprived of their placental blood, contrasted with values of 61 per cent on the first day and 60 per cent on the third day in those infants who received their placental blood. These differences are statistically significant and could conceivably have considerable influence on the oxygen carrying ability of the blood.

McCausland, Holmes and Schuman[11] found that newborn infants receiving the placental blood had higher initial weights, less rapid weight loss and less weight loss in addition to higher erythrocyte counts and hemoglobin values. They feel that the additional blood supplied is of benefit especially to those infants who are in any degree of shock following long labors, difficult deliveries, abruptio placenta, placenta previa or compression of the cord.

Parmalee[12] is of the opinion that it is to the newly born infant's advantage to receive its placental blood.

Bundesen, Potter[13] et al advise delay in cutting the cord until the infant gets the maximum amount of blood from the placenta.

Landau, Goodrich, Francka and Burns[14] reported successful prophylactic treatment of the cesarean section syndrome by placental suspension and drainage to insure the infant's getting his share of placental blood.

Several of my colleagues who have seen infants born by precipitate delivery in the homes, report that in the normal delivery the cord is collapsed and that the infant born before the arrival of the physician has received the placental blood or a considerable portion of it. Apparently, this is nature's way and the infant gets the blood if there is no interference.

Clement Smith[8] states that tradition, convenience, surgical dispatch, and a certain amount of care against unlikely accident decree that the cord be clamped and severed and that the timing is a matter of great variation. Some obstetricians insist upon waiting until the pulsation has ceased, some give the matter little attention, while there are difficult or hazardous circumstances in which delay of any sort may be unwise for the infant or the mother. In some instances the cord has been clamped at once so that fetal blood may be collected for research purposes or transfusion. It may at once be stated that no proof exists of harm coming to the infant from any of these procedures. On the other hand, the adjustment the infant is prepared to make in the face of such fortuitous blood gains or losses is a striking example of the physiologic resiliency of newborn life.

McCausland, Holmes and Schuman[11] in their survey of 1,900 diplomates of the American Board of Obstetrics and Gynecology, of whom 1,198 answered, found considerable variation in the management of the cord and placental blood. Forty-one and five tenths (41.5) per cent clamped the cord immediately after birth. They found no uniformity in the management of cord and placental blood in the teaching in medical schools or among those physicians specializing in obstetrics.

Larsson's[15] survey to 2,000 members of the same organization regarding their management of premature births, of whom 1,263 replied, found that 30.25 per cent clamped and cut the cord immediately.

It is evident that there is little agreement among those with the best training in obstetrics regarding the importance of the placental blood to the newly born infant, full term or premature.

Eastman's[16] comments regarding Larsson's work includes the following direct quotation: "Dr. Larsson has performed a real and timely service in providing this cross-section of American opinion on the obstetric problems of prematurity. Among other useful purposes, the paper will call to the attention of obstetricians everywhere their heavy responsibilities in the management of premature labor. Moreover, the article will remind them of ways in which they may have been culpable heretofore in the care of these cases. For example, as Dr. Larsson's figures show, about one-third of obstetricians still clamp and cut the cord immediately, even if the baby is premature. In view of the low iron reserve of premature infants, they need all the blood they can get. Hence, the cord should never be clamped and cut immediately except in those occasional instances in which it is wound so tightly around the neck as to interfere with delivery. Emphasis on this point should greatly reduce the incidence of subsequent anemia in these infants."

Admitting the soundness of Dr. Eastman's views, it is my belief that there is a far more important reason for the premature infant to get all of its placental blood. Observations of premature infants and section infants have led me to the conclusion that the symptomatology that appears within a few hours following birth in some of these infants is a result of hematogenic shock. It is felt that it can be treated prophylactically in many instances, and that it can be treated successfully by blood transfusion in many after the onset of symptoms, if typing and cross matching have been done in anticipation of trouble.

Wickster[17] has called attention to the syndrome of post hemorrhagic shock of the newborn infants born to mothers with placenta previa or vasa previa. Profound anemia as well as shock was readily recognizable at birth in all of his six reported cases. He advises immediate transfusion for these babies on recognition of this important syndrome.

Wickster has pointed out the extreme and easily recognizable cases. Is it not likely that there are many degrees of the same basic process? Most of these are asymptomatic or lead to mild symptoms from which the infant recovers; some lead to extreme symptoms and signs consisting of cyanotic attacks, dyspnea and air hunger which usually show up within four hours after birth and often end fatally within a few hours following the onset of these symptoms. These symptoms and findings are not as obviously attributable to blood loss or deprivation of placental blood as are those of Wickster's group. However, on considering the birth histories of the infants who make up this group, it becomes apparent that these infants might primarily have the same disturbed physiology as those in Wickster's reported cases, but to a lesser degree, thereby delaying the onset of symptoms for a variable time. The factor common to all is early separation of the infant from his placental and umbilical vessel blood supply.

This group, consisting of those whose placental blood supply has been cut off early, includes toxemia, multiple pregnancies, erythroblastosis fetalis, premature separation of the placenta (abruptio), premature labor only, placenta previa, fetal distress, cord around the neck or shoulder, breech delivery and cesarean section. This is the group in which the hyaline membrane has often been reported.[18, 19]

Since it is my opinion that the symptomatology shown by many of these infants within a few hours following birth is basically caused by hematogenic shock, the following are suggested as prophylactic and active treatment procedures:

1. Attempts to obtain the normal amount of placental blood for the infant by:

(a) Waiting for cessation of umbilical cord vessel pulsations and for collapse of the cord before clamping and cutting the cord. (Postural drainage and catheter suction can be carried out during the waiting period. Oxygen can be administered if necessary).

(b) Placental suspension and drainage for cesarean delivered infants.

2. Gastric suction immediately following birth and hourly thereafter when indicated, especially for cesarean section infants.

3. Blood typing and cross matching for those infants considered to be likely candidates for the shock syndrome (those infants who have been early separated from their placental blood supply).

At the first signs of onset of the shock syndrome, blood transfusion is advisable. Any of the available peripheral veins may be used. Transfusion through the umbilical vein by use of a polyethylene catheter, with or without an umbilical vein cannula, is also suggested, according to the technic devised by Diamond[20] et al.

REPORT OF CASES

Case 1. (From the Service of Dr. W. F. Francka, Chief of Staff and Surgical Chief, St. Elizabeth Hospital, Hannibal). D. H., second of twin boys delivered by cesarean section at 1:05 p.m. on November 12, 1952, because of abruptio placenta with a moderate amount of maternal blood loss for several hours. Average amount of mucus aspirated from the pharynx. Spontaneous gasp shortly followed removal from the uterus. Gastric suction yielded no fluid. Heart action was strong throughout. Infant resuscitator was used with effect and infant breathed well and color was good at 1:10 p.m. The umbilical vessels were not thrombosed.

The placentae were fused. There was about one fourth area of separation of the maternal surface. Cord was collapsed at 1:13 p.m. About 40 cc. of blood were collected from the two severed cords. Some of this blood ran down the outside of the cords from the placentae, however.

No abnormalities were noted and the infant was placed into an incubator. Oxygen at 4 liters per minute, constant, was started.

Condition remained good until about 4:30 p.m.; at that time infant had a severe cyanotic spell which was relieved by oxygen by funnel. Grunting labored respirations ensued and continued. Color was good while oxygen was administered. Heart tones were fairly good. Chest was normal and pulse was 140 to 160. It was felt that the patient's condition was due to hematogenic shock.

Transfusion of whole blood was given by scalp vein slowly; the blood was pumped in. The area about the site of the transfusion turned a deep red during the time the blood was pumped in and faded slowly while the 5 cc. syringe was being refilled. This area was about 6 cm. or 7 cm. across with interspersed pale areas and was roughly triangular in shape. Twenty-five cc. of blood and 5 cc. of normal saline solution were administered. After 3 or 4 cc. of blood were pumped in, a bubble was found in the system and the adapter was disconnected from the three way stop-cock. Blood came from the open end in a steady stream. After the system was cleared of the bubble, which took but a few seconds, the transfusion was resumed and finished without difficulty. The infant was returned to the nursery in excellent condition. Respirations were even, regular and not labored. The course from there on was uneventful.

It is my opinion that this is an example of hematogenic shock in a newly born cesarean section premature infant, successfully treated by blood transfusion.

Case 2. B. K. R., 4 pound 11 ounce female infant was delivered by Dr. Francis R. Burns following a long hard labor characterized by lack of uterine relaxation between contractions. Membranes ruptured 2 hours and 50 minutes before delivery. Large amounts of blood-stained fluid were passed following rupture of the membranes. Contractions became harder with less relaxation between. By that time, it was obvious that the patient had a placental abruptio although there had been no signs of shock and no evidence of possible toxic basis for abruption.

Infant was born at 12:35 p.m., April 30, 1954. Immediately after the head was delivered a large amount of blood spurted from the vagina as if under pressure, and, following delivery of the body, considerably more blood and clots were passed.

"Inspection of the cord and placenta revealed a rather small placenta with a battledore type of insertion of the cord. The area of separation of the placenta involved approximately 1/3 of the maternal surface and was situated adjacent to the margin to which the cord was attached. This seemed to indicate that the mechanism of separation in this case was a mechanical one in which the placenta became partly detached due to traction of fetal movements on the abnormally short cord, causing separation of the margin to which the cord was attached. The cord itself measured 13 inches in length and was partially thrombosed at the time of delivery." Francis R. Burns, M.D.

The baby cried shortly after delivery, but was considerably depressed. It was noted at delivery that the baby's cord was unusually short and also partly thrombosed. The baby was removed to the incubator as soon as mucus was aspirated and as soon as fairly satisfactory respirations seemed established. Coramine, ½ cc., was given intramuscularly.

Infant's color when placed into incubator was fairly good. Respirations were regular and there was no dyspnea, cyanosis or evidence of respiratory struggle. The infant was normally active when report was received from nursery at 2:50 p.m.

At 3:30 p.m. when blood was taken from heel puncture, infant was lethargic, had a pallid cyanosis and respirations were rapid and shallow.

Infant was taken to surgery for transfusion immediately. Oxygen was given constantly. Heart tones were not good. Chest normal except for shallow respirations. There were no rales. Femoral pulse was weak. Diagnosis of hematogenic shock was made.

Two attempts to get into the left antecubital veins and dorsal hand veins were not successful. When tourniquet was removed from the forearm, the forearm and hand remained pale for longer than the usual time. The infant did not resist these attempts at venipuncture. Anterior frontal scalp vein was entered and 40 cc. of citrated blood was given. After 15 cc. were given there was a distinct change in the infant's appearance. The color changed to a healthy pink and it remained so. Respirations were regular, deeper and less rapid. Heart tones were good at the conclusion of the transfusion and the infant was returned to the nursery considerably improved. There was a steady general improvement throughout the night. The following day the infant was normally active for one of its size.

Weight dropped to 4 pounds 4½ ounces at eight days of age. Thereafter, she gained steadily and was discharged to her home at 25 days of age, weighing 5 pounds 2¼ ounces, in excellent condition.

CONCLUSIONS

1. A theory of hematogenic shock as a contributing factor in many natal day deaths is postulated.

2. It is felt that this is especially true in many instances of deaths of premature infants.

3. Suggestions regarding its prophylaxis and active treatment are made.

4. Case histories of two premature infants so treated are presented.

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A Brief Re-Evaluation of Clinical Allergy

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ALLERGY MEANS many different things to many different people, sometimes including members of the profession.

Many doctors are quite familiar with all of what I am about to say and much more. And there is much, much more.

But to a few, allergy is a vague something or other, not particularly common, perhaps a nuisance for the time being but the patient will get over it! Besides, there is not much that can be done for it anyway!

For example, one certain busy pediatrician told me a short time ago that he probably sees one or two children a year who may be allergic and could, as he put it, "probably use some skin tests." But, in all probability, during these winter months he sees several children every week who are badly in need of, not "just some skin tests," but a good allergy study and a prolonged period of careful supervision.

One might still expect it from the layman, but all members of the profession should realize that allergy is not simply a search for eosinophils in the nasal smear, or the removal of a large number of foods from the diet, or both, and the advice to get a kapok pillow and the prescribing of an antihistamine. These are not the alpha and omega of clinical allergy. In other words—the performance of a few skin tests and the giving of a few "shots" should no longer be considered the better practice of allergy—not any more than can the taking of an x-ray, in itself, be considered good roentgenology. Skin tests and x-rays are no better than the doctor behind them. Therefore, so that all may have a better understanding of this subject, one should begin by asking a few questions.

Just what is allergy? What are the allergic diseases? How much allergy is there? How much does the suffering it causes really concern the patient? What are its damaging influences? Its complications? What can be done about it? These are samples of questions which I shall attempt to answer in this survey of clinical allergy.

Tomorrow there will be, by conservative estimate, a minimum of 500 people consulting doctors in the St. Louis area, primarily because of allergic respiratory disease. And this will continue at the rate of at least 500 different people every day for the next two months. The doctors who will see the great majority of these people are pediatricians, otolaryngologists, general practitioners and internists.

In addition, there will be numerous other patients confronting other doctors in other specialties with questions which are secondary but only in that they are not as urgent. The answers to these questions are, nevertheless, important to the individual. For example, there is the patient who is anxious to know whether or not, because of his asthma, he would be a good laparotomy risk. Another example is the anxious, asthmatic prospective mother asking her obstetrician whether or not her child will be asthmatic.

The answers to such questions can contribute immeasurably to the future health and happiness, or lack of it, in great numbers of people.

Allergic diseases can be divided into three general groups according to their prognosis, which, for practical purposes, can be considered as good, not so good and poor.

Considering the last mentioned first, what are the diseases which can be generally considered, from a standpoint of allergy, as having a poor prognosis? These are, and topping the list perhaps, and contrary to much popular thought, headaches. Also included in this list are hypertension, vague abdominal pain which cannot be otherwise diagnosed, vague skin conditions which have resisted other types of therapy, epilepsy and arthritis. I am aware that from time to time these diseases, and particularly headache—if headache can be called a disease and not just a symptom—have been reported on by different authors with

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much enthusiasm and in glowing terms. And while I am also aware of the fact that success frequently depends upon minute attention to detail, particularly in allergy, I can only say that most cannot duplicate these findings. There are, of course, exceptions among these diseases, but I feel that they are few and far between.

It is not my purpose to prove that such cases are not generally allergic. But having known others who were certainly qualified to try and who failed in any appreciable number of cases, I can only suggest that perhaps there were other reasons why an occasional doctor may have believed he was successful in a high percentage of cases. One reason raises the question of whether or not the doctor really saw his patient—or did he conclude that since the patient failed to return, it must have been due to having been cured by removing sweet potato from his diet at the last visit!

Secondly, how great a step is it for some physician to take when he assumes that he has benefited the patient when, upon applying his "My but you look better, you are a lot better, aren't you?" technic, the patient agrees. Of course, the patient may be answering in self defense or may be actually experiencing a variable but temporary improvement such as occurs repeatedly in many diseases.

There are two things which one must bear in mind if one is to properly evaluate results when dealing with subjective symptoms: (1) One must see the patient professionally over a sufficient period of time, and (2) one must permit that patient to retain his sales resistance.

A second group of diseases which are probably allergic and in which the prognosis, though better than in the first, still leaves a great deal to be desired, includes urticaria, angio-edema, infantile eczema, atopic eczema and even so-called allergic conjunctivitis. Of this group, I should like to say a little bit with regard to two, namely: atopic eczema and urticaria.

Generally speaking, atopic eczema such as that type of eczema which appears typically in the folds of the elbows and behind the knees—the so-called flexure surfaces—can be divided into two groups—those which have an associated respiratory allergy and those which do not. And of the two, those which do have an associated respiratory allergy generally have a somewhat better prognosis than those who do not. I do not know why.

Concerning urticaria, the problem is somewhat different. Most feel that urticaria can be divided into three general groups. I am not suggesting the relative percentages of these groups. These three groups are first, those which are probably due to extrinsic causes, including foods, inhalants and various medications. The second group, and to which I personally have leaned in the past, is considered to be due to foci of infection. Many feel that failure in some such instances is not due to improper diagnosis or interpretation as to the cause, but is more likely to be due to lack of skill in locating and removing the focus of infection. The third group, and one on which I think all will agree, is that in which a varying degree of anxiety is the major factor.

Occasionally, I am asked my opinion with regard to the influence of anxiety upon manifestations of the allergic state. I think, as I am sure all do, that anxiety is a contributing factor, as in what noninfectious, nonacute, nonsurgical disease is it not? However, most feel that anxiety, like a cold wind or the inhaling of chemical odors, is a trigger mechanism and not in a large number of instances wholly responsible, within itself, as the cause of allergic disease.

Next is the group regarding which most feel the prognosis is generally good. These include the respiratory allergies—asthma, hay fever and allergic rhinitis, each of which I should like to touch upon briefly.

Hay fever is usually not difficult to diagnose, but it is well to remind ourselves from time to time that hay fever, like other allergies, begins, as a rule, in the earlier years of life. One of the best published reports concerning this was made by Clein[2] several years ago in which he showed that of 100 allergic children under 10, thirty-eight had hay fever, and of these thirty-eight, sixteen had developed hay fever before they were 3 years old.

Concerning asthma, I would like merely to call attention to one differential diagnostic problem. It is that some physicians are inclined to label as asthma a more or less persistent, wheezing condition in older people which is really bronchitis. Such people frequently respond, if only slightly, to epinephrine and to aminophylline, which facts are offered, together with the wheezing breath sounds, as evidence of allergic bronchial asthma.

I am not suggesting that older people do not have asthma but merely wish to point out that when such a condition has been present for a period of no more than a few years in a patient 55 or 60 years of age, it is not likely to be allergic bronchial asthma. Rarely will a person develop asthma at the age of 50 without a history of other long term allergic respiratory disease. And any attempt to determine the allergenic or sensitizing substances in such a person is generally a waste of effort and the patient's money. Furthermore, it serves in building of an unfounded hope.

These cases of bronchitis—oftentimes with a varying degree of emphysema—rarely respond appreciably to allergy study or allergy therapy. Also, such cases of bronchitis sometimes develop an obstructive dyspnea because of the mucous plugs in their bronchial tubes and then mistakenly are diagnosed as "status asthmaticus."

Next in this triad of allergic respiratory diseases is allergic rhinitis, frequently referred to by the layman as "frequent colds" or "sinus" and sometimes still termed "vasomotor rhinitis" by the profession.

Allergic rhinitis, alone or associated with hay fever, is a common precursor of asthma, and is the most widespread, most frequently missed, and most underestimated of all allergic diseases.

It has been variously stated that from 5 to 15 per cent of the general population is afflicted with allergic rhinitis. Because it so easily and frequently invites superimposed infections, it is responsible for the giving of much penicillin and the sulfa drugs. In itself the misery and lost time which it causes is tremendous. With its complications which so frequently follow and which include allergic bronchial asthma and the impairment of the developmental growth of children, its damages cannot be even remotely estimated.

But why is the diagnosis of allergic rhinitis so frequently overlooked? And why be so content to temporize when allergy is recognized or even suspected as in the case of the child who has "just a touch of allergy"? Is the diagnosis of allergic rhinitis missed because physicians do not know? Or is it carelessness? Or is it just plain indifference—a feeling that if the patient is not cyanotic and does not have a fever of 105 F., that it is not particularly important? Or maybe a feeling that when the acute exacerbation is over and the patient does not return, that their obligation is ended? And why does not the patient return? Is he content to have a stopped-up head or does he have reasons to feel that nothing more can be done for him? And how many parents are wastefully waiting for Junior to outgrow his so-called colds, thereby permitting the condition to grow slowly but progressively worse, its damaging influence, both physically and emotionally, becoming steadily more advanced?

If, though, one discounts the reason of indifference, there remain but two possibilities left: (1) a feeling that nothing much can be done anyway in regard to allergic rhinitis in particular or for allergic respiratory disease in general, and (2) a limited ability to diagnose allergic respiratory disease.

Concerning the first, I can only say that this attitude, generally speaking, is not in keeping with the trend—that in reality a great deal can usually be done to control these diseases and to prevent their complications.

But then if physicians do properly realize the severity and the consequences of the allergic patient's problem and if they do become convinced that much can be done to change the situation, where, then, are mistakes being made in not seeing as much as is reported to exist? Where are the mistakes in not recognizing this frequent disease? Here again, as in all things in medicine, diagnosis is primarily dependent upon history and physical examination.

Regarding the history, it is true as in any history of illness of relatively long duration, that pertinent facts are often not revealed during the first interview. It is often not until the second or third attempt that one learns things that are relevant and important in making a diagnosis of allergic rhinitis. Such information often reveals the occurrence of frequent "colds," relatively long sieges of "stuffy nose," usually without systemic effects typical of a "true cold." These so-called colds are seemingly more prevalent in the winter. Oftentimes such a patient also has an uncontrolled seasonal hay fever. Commonly, one learns of others within the immediate family who have hay fever or asthma or who also have "frequent" colds or "sinus." But generally speaking, it can be said that anyone who at least gives a history of frequent colds or varying degrees of repeated nasal occlusion is entitled to a serious and capable consideration concerning allergy. And nose running or rhinorrhea is not necessarily an accompaniment.

On the other hand, any patient who, usually upon specific questioning, also gives a history of itching of the eyes or the nose or deep in the ear canal or roof of the mouth, can be said to be allergic until proven otherwise. Again, however, these symptoms, like a family history of allergy, are oftentimes not revealed until specifically asked for, or until the second or third questioning.

Upon examination alone, one can often be easily mislead. This is probably due to expecting to find the textbook picture which describes the nasal mucous membranes as being pale, boggy and wet. And this is often, but not always, correct. Many of these patients have an acute or chronic superimposed infection, because allergic membranes are somewhat more susceptible to respiratory infections than are nonallergic membranes. Therefore, then, the infectious picture which a nasopharyngoscopic examination reveals does not rule out allergy. And again one is dependent upon the history to make the correct diagnosis.

Nasal smears may be used as an aid in differential diagnosis and if eosinophils are found in proper distribution and numbers, then the diagnosis is made easier. However, with infection present, pus cells frequently disguise the picture. Furthermore, not all have the talent for making a diagnosis of allergic respiratory disease on the basis of eosinophils found in the nasal smears.

TREATMENT

Specific treatment in allergy is essentially twofold: (1) the removal of as many and as much of the offending allergens as practical, and (2) treatment of the patient against those things which cannot be sufficiently removed. This process of hyposensitization is the building of the patient's tolerance to the offending allergens.

Most allergic people are said to live in a so-called balanced allergic state—that condition in which they are ordinarily comfortable and in which the offending factors are ever present but in not quite sufficient quantities as to tip them over, thereby producing symptoms.

The allergic patient may, in a sense, be compared to a glass full of water resting undisturbed upon a table. As it sets there, nothing happens, but any attempt to add more water to the glass will cause it to spill over. So it is with the allergic patient, and so it is that efforts are directed toward removing as much of the contents of that glass as one can and attempting, through injections, to build up the sides of that glass so that the differential between what it contains and what is necessary to spill it over—or in the allergic patient, to cause symptoms—is so great that nothing happens.

In practice, however, the problem is, of course, not as simple.

One other comparison can be made between the allergic patient and the glass full of water setting upon the table as a means of explaining why people believe themselves sensitive or allergic to such things as cold winds, or chemical fumes. It may also explain why a patient may get asthma upon seeing a car wreck, in that such things are believed to serve as trigger mechanisms which set off the symptoms. The comparison is that, concerning the glass of water, it does not spill over if no more is being added unless or until something comes along to disturb its balance, to jar it suddenly as in bumping the table, thereby causing it to spill. The cold wind, in one instance, the jarring of the table in the other, both serve as trigger mechanisms.

Treatment by removal of allergens or treatment by injections of allergenic extracts, or both, are loaded by many pitfalls. And both are dependent upon the allergens which are responsible—the things to which a patient is sensitive. And these substances, of course, are likely to be determined by many factors in a patient's history, ranging from his age to his occupation. This history is important in enabling one to arrive at a correct interpretation of skin tests, which is quite another story.

However, having determined the allergens, one must not only be acquainted with the sources of such contact but also must realize how to avoid them. For example, if one decides that a patient is animal dander sensitive, it rarely suffices to put the dog out—because the dog dander, well implanted in the rugs and upholstery remains.

Similarly, a food must often be removed in its entirety in that minority of cases in which foods may be considered to be important allergens. In such instances, the patient should be advised to eat only fresh meats and fresh vegetables until learning a few possible food combinations which he may eat with impunity. For a doctor to learn and remember all of the countless numbers of possible food combinations in mixed or prepared foods is an impossible and unnecessary task.

Specific treatment should be carried out with a combination of extracts, properly proportioned, of all inhalants to which any given patient is believed to be allergic. These dosages are to be built up in most cases to a point just barely below the individual patient's tolerance. This is particularly true in pollen therapy. While doing this, one should be constantly on the lookout for a systemic reaction. All patients should be warned that such may happen and, when it does, the patient should receive prompt attention.

Also, the psychologic approach with any given patient is extremely important. One can advise what are relatively minor changes in his way of life and contribute to a real sense of security with well timed reasoning. Or, one can present him with what appears only as restrictions and thereby simply add to his conviction that he has little to look forward to except an added form of suffering.

There are patients who cannot possibly comply with recommendations because of the great inconvenience, loss of time or expense until a parallel is drawn between the little that is being advised as compared to the many things that most people do every day.

I feel that I should say something about bacterial allergy. Some are much too quick to think of a patient as having a bacterial allergy because (1) he has a frequent recurrence of colds or evidence of repeated acute respiratory infection; (2) the appearance of his nasopharynx appears to be almost constantly that of a moderate or low grade infection irrespective of the amounts of antibiotics or sulfas that are prescribed for him.

There is no denying that this infection is present, or that it persists in spite of antibacterial therapy. But to assume that it is a bacterial allergy is to forget that extrinsic factors in an allergic individual tend to keep the respiratory membranes in such a state that infection recurs or persists. And in most of such cases the treatment is to properly consider and treat the patient with regard to extrinsic allergens and the infection is usually then automatically controlled. Certainly, a well controlled allergic patient can get a "cold" —but ordinarily such a patient will get no more colds nor are they of any longer duration than those of the nonallergic person. This is not to say that there is no such thing as bacterial allergy because there is and it is not rare, but neither is it as common as is too frequently believed.

Among important complications which frequently develop with allergy are deviations from the normal personality pattern, particularly in children. Such a deviation is frequently evidenced in the following ways, as stated by Cohen:[3] (1) He is irritable and whiny. (2) He is erratic in his behavior. (3) Hyperactive periods alternate with periods of great fatigue. (4) He has a short attention span. Any one or more of these may be more clinically evident than the others. Sometimes listlessness or fatigue is more outstanding and may even lead one to believe the child is mentally below par as well as physically sick. Frequently, too, a mixture of these behavior problems may be seen in a child bordering upon or in the subclinical allergic state.

According to much evidence, another extremely important and measurable complication of allergy is its effect upon developmental growth. It has been shown as a result of capable studies by Francis[5] and his coworkers, that allergy "frequently serves in no small way as an encroachment, a deteriorating influence upon the otherwise normal healthy state. It serves in undermining the constitution."

Of all the diseases which inhibit developmental growth—hypothyroidism, nutritional deficiencies, chronic infectious diseases—there is considerable evidence that allergy, perhaps through a disturbance of calcium metabolism, is directly or indirectly responsible for as many such instances as everything else put together. For example, one capable survey by Straub[8] showed that of 104 orthodontic applicants, forty-one or 39.4 per cent were definitely allergic; thirteen or 12.5 per cent were borderline, and fifty or 48.1 per cent were negative. It should be safe to assume that a number of these negative cases, at this still early age, may still develop a clinically manifested allergy.

It should therefore appear evident that the antihistamines or other medications for symptomatic treatment should be considered to be, and used, only as a crutch insofar as practicable. In addition, every other reasonable and intelligent effort should be made to bring the allergic state under the best possible control.

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POST-OP GLYCOSURIA

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. . . 10 per cent fructose given at a rate of two to three hours per liter in adult patients during the postoperative period is followed by much smaller loss of urinary sugar than 10 per cent dextrose.—J. A. Moncrief, M.D., K. B. Coldwater, M.D., and R. Elman, M.D., St. Louis, *Archives of Surgery.*

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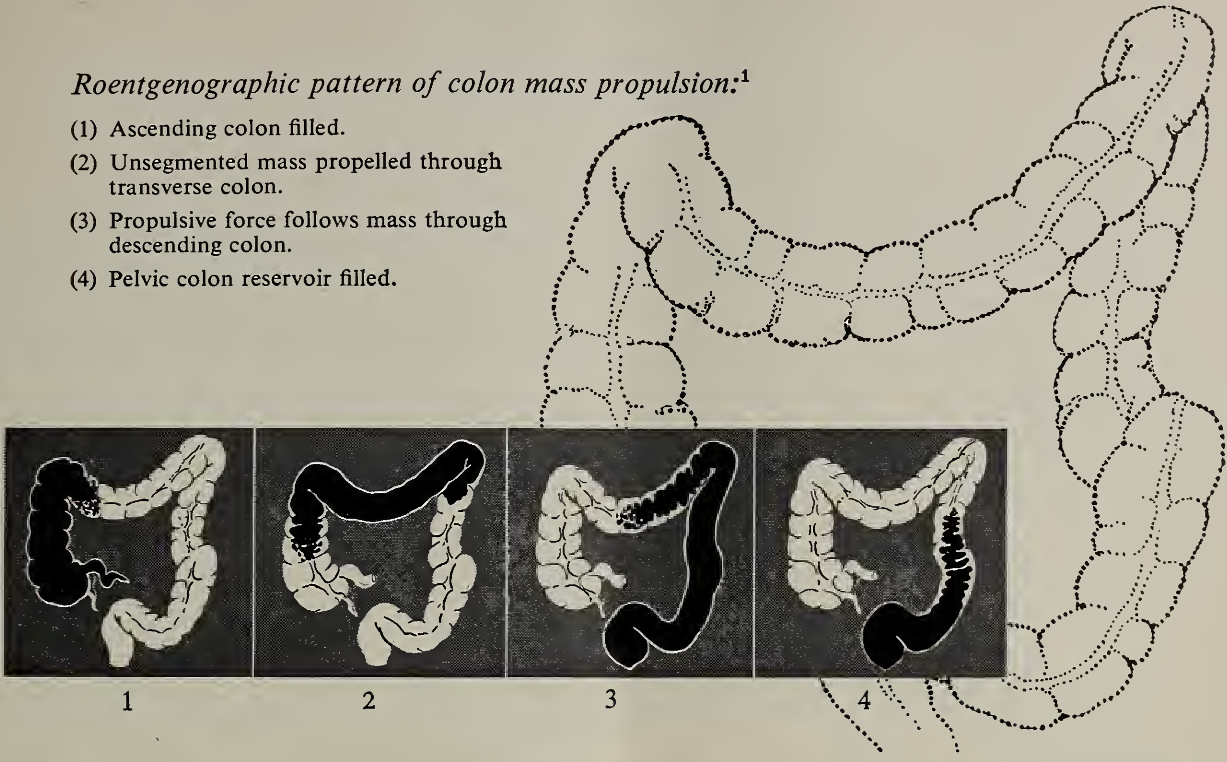
Roentgenographic pattern of colon mass propulsion:[1]

(1) Ascending colon filled.
(2) Unsegmented mass propelled through transverse colon.
(3) Propulsive force follows mass through descending colon.
(4) Pelvic colon reservoir filled.



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Postgraduate Review

Diverticulitis

RUDOLF J. NOER, M.D., *Louisville*

Diverticulosis and diverticulitis, both relatively common afflictions of individuals of middle age and beyond, have received less attention from the profession than they deserve, and it is only in recent years that the serious import of diverticulitis and its complications has been appreciated. Diverticulosis is a condition characterized by the occurrence of small and usually multiple mucosal pockets protruding through the walls of the colon at various levels. When inflammation occurs in these diverticula, usually as the result of obstruction to the orifice, the condition becomes known as diverticulitis. A third term, "peri-diverticulitis," has been added by some authors in an attempt more fully to describe the changes which may occur in the bowel wall later in the course of the disease. The incidence of diverticulosis is considerable, but the figures given in various series[1, 2, 3, 4] differ so greatly that it is hard to estimate just how common the condition really is; various authors have reported the incidence as from 5 to 20 per cent of all individuals over the age of 40. Welch,[5] discussing the treatment of diverticulitis, estimated that approximately one-fifth of all people with diverticulosis will eventually become prey to diverticulitis and that approximately one fifth of these will ultimately require operative treatment.

The ever widening scope of surgical treatment in recent years has brought a trend toward more use of operative therapy in selected cases. Whereas a nationally prominent proctologist a few years ago said that diverticulitis and diverticulosis are always medical diseases, always have been and always will be, the newer trend is typified by the editorial comment of Graham in the current "Year Book of General Surgery":[6] "The general tone of all the preceding five articles is for early resection of the involved colon in a case of diverticulitis. This attitude is thoroughly sound in view of the comparative safety of the operation nowadays. The old policy of watchful waiting is becoming untenable." This presentation is aimed at a better understanding of the serious hazards of the complications of diverticulitis and an appreciation of the place of operative treatment in their management.

The pathogenesis of diverticulitis is somewhat obscure despite much that has been written upon that subject. Boyd,[7] in his "Surgical Pathology," describes three stages in the development of diverticulitis: (1) a prediverticular state, in which a spastic segment occurs in the bowel, this segment failing to dilate and showing a rather ragged outline on roentgen study; (2) diverticular formation, in which stage the bowel shows irregular segmentation, is broad and deeply serrated on x-ray films, and eventually develops the characteristic spiked or saw tooth appearance when the diverticula themselves become apparent as outpouchings through the colonic wall; (3) diverticulitis, in which stage the normal peristaltic waves are lost, due to thickening of the wall about the inflamed diverticula. Boyd adds the comment that careful medical treatment may prevent the occurrence of diverticulitis, but that once it occurs it may be expected to be progressive. The diverticula themselves usually consist of mucosa covered by serosa, being in a sense a herniation through the other layers of the bowel wall. This has led to considerable speculation as to what is responsible for this mucosal outpouching. The ideas generally proposed are three: (1) The diverticula may follow a weakness produced by vascular components in their passage through the musculature of the colonic walls. (2) Localized infection and inflammation may perhaps produce a weakness in the wall, which leads to outpouching. (3) Colonic pressure variants may be responsible for these herniations, and are thought by some to be a necessary part of the pathogenesis. In support of this is the observation that a considerable number of these patients give a history of constipation and that nearly all of them are accustomed to sedentary occupations. Seymour Barling[8] reported seeing (at operation) a sudden narrowing of a segment of the colon with the appearance of small saccules between the longitudinal bands which disappeared after the spasm had passed off. This appears to be the only recorded observation of this type.

The appearance of the diverticula is quite characteristic. They are usually multiple and occur in two rows, on the convex side of the intestine rather than at the point of mesenteric attachment. As a general rule, they are found along the taenia and occasionally they pass into epiploic appendages. They vary in size from a few to several millimeters in diameter, and the size of their orifices likewise varies considerably. They are apt to contain feces and their degree of emptying appears to be dependent upon the size of the orifice, as would be expected. It should be pointed

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From the Department of Surgery, University of Louisville School of Medicine.

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out that both "true" and "false" diverticula have been described. The false ones, of course, are those described, in contrast to true diverticula which would include all the layers of the colon. The latter are quite uncommon in the colon, but occur not infrequently in the small intestine where their presence is usually of no consequence to the patient since the size of their orifice and the fluidity of the small intestinal content combine to make inflammation an uncommon complication.

Only recently have physicians begun to appreciate the importance of diverticulitis and its complications. Belated recognition of the serious import of this disease has probably been due to several factors: (1) a tendency, generally, to regard it as a medical disease, and thus to accept it with a type of fatalism which does not inquire beyond the diagnosis but hopes for recovery under such simple measures as rest and dietary restrictions; (2) the high mortality which occured in years gone by whenever operative treatment was tried encouraged the viewpoint expressed in;[1] (3) widespread failure on the part of the profession to appreciate the serious hazards to the patient of the complications of diverticulitis; (4) the tendency in certain quarters to avoid all operations whenever humanly possible even though "conservative" management may actually be, in point of fact, more hazardous than operation. Though the statement is frequently made that certain patients will not "stand surgery," one must not forget that there are also many who cannot stand medical treatment.

The presence of diverticulosis is usually first detected by x-ray studies, since the only other way in which the diagnosis could be made would be to actually see the diverticula at operation. On the barium enema x-ray the diverticula appear as small outpouchings from the main column of barium as it is observed in the colon. Diverticulitis is usually a clinical diagnosis. The occurence of left lower quadrant pain and localized tenderness in an individual past middle age, particularly if a previous diagnosis of diverticulosis has been made, must always lead one to suspect the possibility of this disease. Certain other conditions may confuse the picture but, as a general rule, the diagnosis is not unduly difficult. It is generally believed that barium enema x-ray studies ought not to be used during the acute stage of the disease because of the hazard of pressure from within or palpation from without at the time of injection of the barium, causing a perforation of the already acutely inflamed diverticulum. Sigmoidoscopy, while valuable in nearly all diseases of the lower bowel, is ordinarily of little help in the diagnosis of diverticulitis, for the diverticula usually lie beyond the reach of the sigmoidoscope. Diverticula of the colon are usually multiple and they occur more frequently in the descending colon and sigmoid than elsewhere, though it is quite common to find them distributed in a more or less haphazard manner throughout the large bowel. In the diagnosis it should be remembered that the thickening of the colonic wall which occurs as a result of recurrent attacks of diverticulitis may produce an x-ray picture indistinguishable from that of carcinomatous infiltration of the wall. If to this is added narrowing of a localized area in which diverticulitis has occurred, it is apparent that confusion with carcinoma may well occur. Under these circumstances the only safe way to make the differential diagnosis is by exploration. Difficulty in differentiation may occur even at operation because of the resemblance of the thickening and infiltration of complicated diverticulitis to that produced by cancer. The only solution to this problem is a type of colonic resection which would also be acceptable for carcinoma; if pathologic study reveals only diverticulitis no harm will have been done; whereas, if the disease proves to be carcinoma, the patient will have been given his only good chance for recovery.

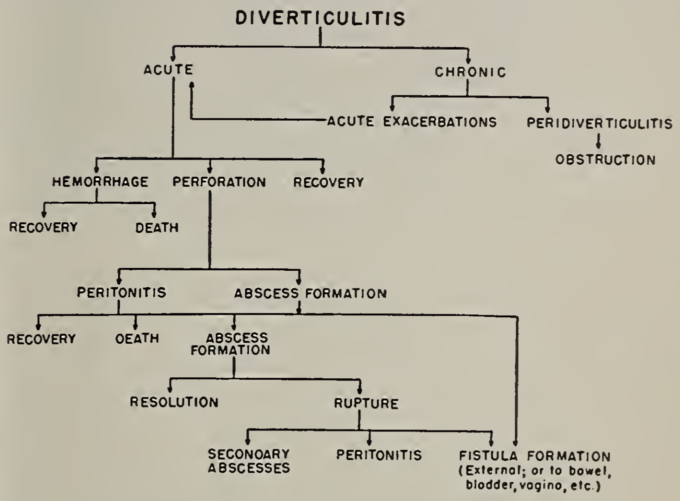

Fig. 1

Diverticulosis is without particular hazard for the patient except through its potential for the development of diverticulitis and its complications. These may be briefly outlined as shown in the accompanying illustration (fig. 1). Acute diverticulitis may lead to either resolution and disappearance of the disease with only thickening of the wall remaining as evidence of the previous inflammatory process, or it may progress to rupture. If this occurs, there may be abcess formation followed by either resolution or generalized peritonitis. Secondary abscesses may develop if the patient does not succumb to this disease, and fistula formation either into the bowel or other organs or to the exterior of the body may also occur under certain circumstances. A frequent later complication, particularly after multiple attacks, is that of partial obstruction of the colon due to thickening of the bowel wall and narrowing of the lumen resulting from the repeated inflammatory processes. A third complication, hemorrhage, has only recently become recognized as a fairly common occurrence and will be discussed later.

The treatment of acute diverticulitis in the past has been bed rest and sedation with dietary restriction, in the hope that the process would spontaneously subside. There can be little doubt but that the occasional mild case of diverticulitis will be handled quite adequately by this regime. There is likewise no question but that many patients so treated have succumbed to generalized peritonitis or to other septic processes following perforation of acutely inflamed diverticula. It is unwise to temporize too long in the hope of avoiding operation; colostomy, through diversion of the fecal stream, offers the only real means for putting the colon at rest, and rest still remains essential in the spontaneous healing of inflammation, whatever its nature and wherever it is located. Colostomy is a relatively benign operation, accompanied with a low mortality and can easily be done with a minimum amount of equipment and assistance. I, personally, have seen several patients in the last few years whom I am sure have been spared critical illness, and perhaps death, by the simple measure of a right transverse colostomy diverting the fecal stream away from acutely inflamed sigmoid diverticulitis. There is no good reason to avoid or unduly delay this procedure. Other attacks upon diverticular perforation in the acute stage have not been successful. Direct approach to the diverticulum, with the aim of closing it, has not been too successful because of the friability of the intestinal wall and the difficulty in suturing it. If abscess formation has occurred, and if the abscess itself persists, there is, of course, no alternative but to drain it at the proper stage when one feels that walling off has occurred sufficiently well. Antibiotics are of help during the acute phase of the disease, but one must remember that once pus has formed the antibiotics will have no effect upon that pus; if the body's defense mechanisms themselves do not result in spontaneous resolution of the abscess, drainage will be necessary.

Elective colonic resection in the treatment of diverticulitis has only recently been adopted as a matter of common practice in certain centers. Given an individual with recurrent attacks of diverticulitis, whose colon shows the disease to be localized within a relatively small part of the bowel, there is no reason not to offer relief from the disease by way of a segmental resection of the involved colon. Subsidence of the acute stage is, of course, essential to the success of this type of elective resection. One should ordinarily allow between three and six months following the performance of the diverting colostomy before he attempts to do such colonic resection. It should also be pointed out that if the areas of diverticulosis and diverticulitis are scattered throughout the colon, as is not infrequently the case, the disease is probably not sufficiently hazardous to the individual to justify the much more formidable procedure of total colectomy. I do not know of a total colectomy ever having been performed for this disease and would certainly hesitate to recommend it myself. However, segmental resection, after proper preparation of the patient and of his bowel, carries a low risk and should not be deferred unnecessarily if by this procedure the patient can be freed of the hazards of diverticulitis and made a more happy and useful member of society by virtue of his freedom from the recurring attacks of the disease.

Only recently has hemorrhage been recognized as one of the major complications of diverticulitis. A review of some reports on the complications of diverticulitis reveals that many series fail to even list hemorrhage as a complication. In contrast, however, Welch, about a year ago, reporting 114 cases of resection for diverticulitis, listed hemorrhage as the indication for resection in 5 per cent of these patients.[5] In discussion subsequent to the meeting Welch said that hemorrhage had occurred in some of the other patients as well, but that he had listed hemorrhage only when it, of itself, had been sufficiently severe to cause concern about the welfare of the patient. Not long ago two cases of severe exsanguinating hemorrhage occurred on the surgical service of the University of Louisville at the Louisville General Hospital. The first of these patients was admitted following sudden severe gross rectal bleeding. She was given large quantities of blood, and when over a period of four days she continued to pass bright red blood by bowel and to show continuing evidence of severe blood loss, exploration was undertaken. The entire colon was found to be filled with dark blood and there was also blood in the small bowel. Because of this combination, it was decided that a right hemicolectomy with an ileotransverse colostomy should be carried out. Following this, there was no bleeding for about twenty-four hours, but thereafter she again began to pass large quantities of blood. She was reexplored two days after her first operation and a left colectomy carried out, followed by ileosigmoidostomy. She did not bleed thereafter, but died during bronchoscopy subsequent to operation as a complication of this procedure rather than from acute hemorrhage. Autopsy showed massive hemoperitoneum, and the specimens removed at operation showed multiple diverticula with blood within them. Not long after this, a second patient was admitted following three episodes of severe bleeding. She was given multiple transfusions and when in much better condition she was operated upon, a resection of the sigmoid and descending colon was carried out. The specimen showed diverticula of the colon with blood in the orifices in several instances. The patient was discharged from the hospital in good condition fourteen days later, and barium enema taken since shows only slight narrowing at the operative site and no diverticula.

These cases well illustrate the seriousness of the hemorrhage which can occur as a complication of diverticulitis. The mechanism of the bleeding is not clear, but we can no longer question the fact that it does occur. Colostomy and rest may help but, if the hemorrhage is exsanguinating, exploration and removal of the bleeding bowel is essential if the patient is to survive. The difficulty in the presence of acute hemorrhage, of course, is that of knowing whether the disease is localized and therefore in deciding how much of the colon one ought to resect. Here, truly, "experience is fallacious and judgement difficult." One can only do what his judgement dictates following inspection of the colon in the acutely bleeding case.

SUMMARY

Diverticulosis is a disease of individuals beyond middle life, which is probably more common than most have believed in the past. In itself it is of no consequence but because of the hazards to life and health of the complications of diverticulitis this condition must be recognized as a serious disease demanding aggressive treatment where indicated. The laissez faire attitude so commonly accepted by the profession in years gone by should be abandoned, and in its place an aggressive though rational attack upon the disease substituted. A proximal colostomy for diversion of the fecal stream allows the best chance for subsidence of the process in acute diverticulitis. If despite this procedure, perforation has occurred and abscess formation is present, this must be drained. Fistula formation can only be handled by resection of the involved segment of the bowel, but this only after a long period of defunctionalization, preferably three to six months. Likewise, a section of colon which is the seat of a relatively localized area of diverticulosis and diverticulitis should be resected as a procedure of election in a defunctionalized colon some three to six months after colostomy in order to free the patient of further hazards from the complications of diverticulitis. There does not appear to be justification for total or nearly total colectomy when the diverticula are scattered throughout the colon. Hemorrhage must be recognized as a much more frequent complication of diverticulitis than has been believed in the past. Its presence demands replacement therapy and if the bleeding is exsanguinating or is not controlled by conservative measures, one must resort to colectomy as a life saving procedure. The operative treatment of colonic lesions is now such a relatively safe procedure that it must be recognized that it is frequently much more conservative to carry out a colostomy or to do a segmental resection than to stubbornly persist in rest and dietary treatment of recurring diverticulitis.

323 E. Chestnut St.

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HIRSCHSPRUNG'S DISEASE

. . . in the past the emphasis on Hirschsprung's disease has been directed to the dilated and hypertrophied colon. It is our contention that the primary lesion rests in the distal non-dilated segment despite the fact that grossly the area appears normal . . . we adapted the modification . . . a rectosigmoid resection and pull-through operation done without dividing the rectum intra-abdominally . . .

. . . we believe that resection of the non-dilated segment of the rectum and rectosigmoid with primary anastomosis offers the best chance for relief in congenital megacolon.—J. M. McCaughan, M.D., Joseph Ninecurt, M.D., and Robert H. Ruby, M.D., St. Louis, *American Journal of Surgery.*

NONOPERATIVE TREATMENT OF PERFORATION

. . . There has been a lot of talk about the nonoperative treatment of perforation. It is foolish talk, and it has done a lot of harm because there are a lot of fools about who are apt to believe what they read. I am not claiming for a moment that an operation to close a perforation does much good . . . edges of the hole are rotten edematous tissue . . . repair of the hole depends, not on the stitches we put in at the time, but on the gastric contents we suck out afterward. If the stomach is kept empty by suction, the perforation will close whether it is sutured or not. The reason we operate is to remove the gastric contents that have flooded the peritoneum, the bits of meat, potato, cabbage, and carrot that inevitably bring a septic peritonitis on top of the chemical one if they are not removed. . . .—Sir Heneage Ogilvie, Editorial, *Surgery.*

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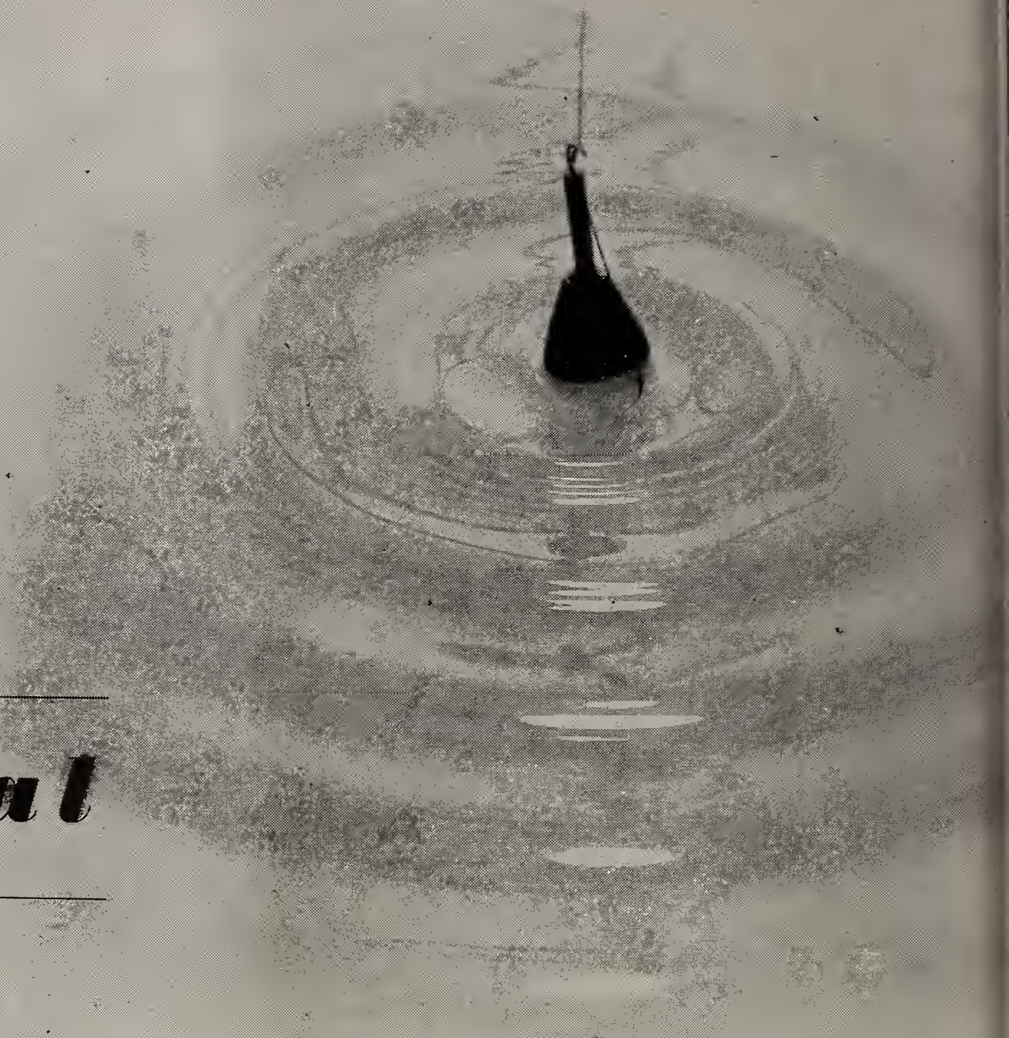

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Case Report

Congenital Duodenal Atresia

W. DEWARD CHUTE, M.D., AND AVERY P. ROWLETTE, M.D., *Moberly*

CONGENITAL DUODENAL atresia is said to occur only once in every 20,000 live births. Because of the infrequency of diagnosis, it was considered worthwhile recording a case and briefly summarizing the recent literature on this subject. Atresia, or complete obstruction, is to be differentiated from various degrees of congenital duodenal stenosis which also occur.

While the original description of Calder was published in 1733,[1] it remained for Ernst[2] in 1916 to report the first successful outcome from surgery. Until the last decade diagnosis of the condition was unusual and successful operation extremely rare. For example, at the Children's Hospital in Boston, there were only six cases operated on prior to 1940 with three surviving, but since 1940 there have been twenty-seven cases operated on with fifteen surviving. A more recent summary[3] from Babies Hospital in New York reports eleven cases with five surviving.

Exclusive of the reports noted, we find in the American literature since 1940, that twenty-two cases are reported with twenty-one surviving and, if we did not know of the two larger series reported, we would assume that the results were good indeed. Since the only hope for these cases is early diagnosis and surgical relief, it is imperative that the condition be well known.

The infant is frequently premature. Approximately 15 per cent of the cases will have associated congenital defects of the intestinal tract.[4] Vomiting usually begins the first day of life and may become projective in type. Upper abdominal distention may be present. Dehydration with its attendant electrolyte deficit from vomiting occurs early. Diagnosis is confirmed by roentgenograms. It has been observed that gas is present in the sigmoid colon or in the rectum of the normal infant at six hours after birth.[4] Thus it becomes highly significant if there is no air in the intestine with a distended stomach or duodenum or both. If the diagnosis is suspected and the stomach is not distended with gas, aspiration of the stomach with insufflation of air has been suggested by Milnan[5] and used successfully to confirm the diagnosis by Kraft.[6]

Correction of the water and electrolyte imbalance prior to surgery is essential. Ladd[7] has stated that an infant within its first twenty-four hours can withstand surgery more readily than he can a week or so later. Open drop ether is the anesthetic agent of choice.

The type of operation indicated is a matter of some debate. Ladd, and later his successor Gross, have long advised duodenojejunostomy and this would seem to be the ideal procedure, but this has been challenged by Efskind[8] who advocates gastroenterostomy. That duodenojejunostomy is apparently technically not feasible in some cases has been repeatedly noted in the literature and seemed to be true in our case. It is quite possible that the more distal in the duodenum that the atresia occurs, the more feasible a duodenojejunostomy would become. It is interesting to note that of the individual reports in the American literature in the last decate that of fourteen groups reporting, that eleven groups report using gastrojejunostomy in seventeen cases with one death and three groups report using duodenojejunostomy in six cases, all living. The longest follow-up in any case is reported by Miller[9] who describes a child of 8 years, perfectly normal after gastroenterostomy at birth for duodenal atresia.

REPORT OF CASE

Baby J. K., born February 10, 1953, birth weight 5 lbs. 4 oz., apparently normal, was a somewhat premature male infant. Nurse noted five hours after birth "baby cyanotic at intervals, seems to have a lot of gas," and she noticed on several occasions during the first twenty-four hours when the baby was removed from the incubator for three hour feedings of dextrose mixture, that the baby would become cyanotic. Baby commenced to spit up feeding at thirty-six hours and to vomit with each feeding after thirty-eight hours. The vomitus contained bile. Baby passed the first meconium, which was apparently normal, at fifty hours. A flat plate of the abdomen at fifty-eight hours (fig. 1) revealed stomach and first portion of the duodenum distended with air but no gas in the intestine or colon. Diagnosis of duodenal atresia distal to the ampulla of Vater was made and operation was performed sixty hours after birth. The stomach was aspirated and decompressed prior to surgery and the gastric tube left *in situ.* The child was operated on under drop ether anesthesia through an upper transverse incision. The stomach and proximal duodenum were distended. The small intestine and colon were completely collapsed and extremely small. A duodenojejunostomy did not appear to be technically feasible so an anterior gastrojejunostomy was performed using a small catheter in the lumen of the jejunum as an aid to identify the wall of the intestine. 00000 chromic catgut double layer suture was used following the usual adult technic and the stoma measured approximately 1 cm. when completed.

Oral feedings were withheld for five days postoperatively, the infant maintained on subcutaneous fluids, electrolytes and dextrose. Gastric aspiration was done regularly every hour or two to prevent regurgitation of gastric contents. Feeding of dextrose water ½ ounce each was started on the fifth postoperative day and were retained and the amounts gradually increased on successive days. Subcutaneous fluids were also continued for four additional days after oral feedings started. The child gained weight slowly, however, and did not regain his birth weight until thirty-three days after operation, and was dismissed from the hospital on his thirty-sixth day. This slow weight gain has been noted more frequently after gastrojejunostomy than duodenojejunostomy and is one of the arguments advanced in favor of the latter procedure.

Approximately three weeks after dismissal the child had gained a pound and a half and a moderate anemia and a large umbilical hernia were noted. The following day a left inguinal hernia appeared which became incarcerated but was reduced manually. Three days later a right inguinal hernia made its appearance. Approximately one month after dismissal from the hospital, the child was given a transfusion and the following day a bilateral Pott's type repair of the inguinal herniae was performed, as an outpatient, and the course was uneventful.

At 6 months the infant had tripled his birth weight and a roentgenologic gastrointestinal examination was reported as "adequately functioning gastroenterostomy stoma." The usual immunizations were given during the latter half of the first year. Examination at 1 year showed the umbilical hernia almost completely closed; he had quadrupled his birth weight and his anemia had apparently responded satisfactorily to a hematonic which was then discontinued.

Examination at 15 months showed a normal child in all respects and the photograph (fig. 2) was taken at that time. We feel that this condition in all probability occurs far more often than the literature indicates and the possibility should be entertained in all cases of persistent regurgitation or emesis in the newborn infant.

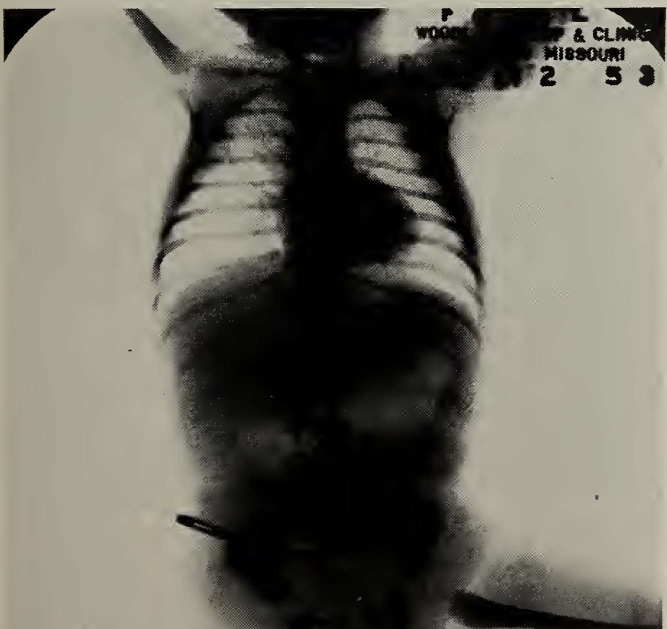

Fig. 1

Fig. 2

Woodland Hospital

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"JUST A BUMP . . ."

A nodule in a thyroid should be excised, regardless of its size, duration, or age of patient. In an adult a non-toxic nodule is malignant in 10 to 17 per cent of the cases or more. In children these nodules are malignant in around 30 per cent. . . . The proper treatment for carcinoma of the thyroid is total removal of the lobe involved, sub-total on the other side, and radical neck dissection of involved side . . . followed by irradiation. Better results would be obtained in preventing carcinoma of the thyroid and treating carcinoma of the thyroid if this plan were followed more closely. . . .—Roland T. Smith, M.D., Joplin, *American Journal of Surgery.*

Special Article

A Little Judicious Levity in Dermatology

W. R. BETT, M.R.C.S., L.R.C.P., F.R.S.L., F.S.A.S.

In the annual oration delivered before the St. John's Hospital Dermatological Society in 1928 Sir John Bland-Sutton complained that "A curious feature of the nomenclature of dermatology is the portentous terms applied to simple diseases of the skin." Those who cannot forget that in Greek mythology Apollo, god of beauty, culture, rhetoric and poetry, and leader of the celestial choir on the heights of Parnassus, was also the father of Aesculapius, upon whom he bestowed the divine gift of healing, may well wax a little hypersensitive to the cacophony of current technical jargon and may well be inclined to deprecate the prevailing tendency to be eruditely verbose in unnecessary explanation of the obvious.

For the medical student dermatology is scarcely one of the easier subjects, for its language is saturated with Latin, Greek, or hybrid minutiae. If you dip into the writings of the older dermatologists, I think you will agree that your specialty readily lends itself to the exhibition in the arid atmosphere of the lecture-theatre of a little judicious levity, which will stick in the student's memory. Let me give you a modern example, of which the ancients might well have been proud. I quote from F. G. Crookshank's "Individual Diagnosis" (1930, pp. 66-7). The author is speaking of the circulation through the liver and of the secretion of bile being affected by worry as is the secretion of tears by grief, and of continued emotional stress leading to structural changes in the liver and to the formation of gallstones:

"The liver has made a series of grimaces and has been 'struck so.' So did the grin of the Cheshire Cat remain in Wonderland even when the cat had vanished. So, too, does the fleeting blush of maidenly modesty, if too carelessly evoked, pass into rosaceous grog-blossoms at the climacteric."

One of the reasons for the decline and fall from grace of dermatological language may be the fact that at one time dermatologists were more broad-minded in that they were united in holy matrimony with some other branch of medicine and merely lived in sin with dermatology. The late Sir Arthur Hall[1] told this Association in 1935 that clinically speaking, dermatology was his earliest love, "and, as everyone knows, even if the earliest love does not happen to become the life's partner, yet it is always pleasant to recall happy memories of bygone days." The special department at the particular hospital where he studied was for the time being under the charge of an assistant-surgeon, "who later rose to eminence; but his heart lay in the rectum, not on the skin."

Robert Willan,[2] writing to his brother in 1809, mentioned taking a holiday during "a part of July and August . . . while the grandees are out of town. I am well in with that class at present and can produce a long list, but you do not study the Red Book as my father did. Whatever stuff they are made of, you will be at least satisfied on my account that they are disposed to bleed freely and make my wheels rattle with great alacrity six months in the year."

Sir Jonathan Hutchinson, F.R.C.S., for many years was surgeon to the Blackfriars Hospital for Diseases of the Skin. The first volume of his "Lectures on Clinical Surgery" (London: J. & A. Churchill. 1879) is entitled "On certain rare diseases of the skin." I quote from his lecture "On ichthyosis" (pp. 170-1):

"In my younger days I was taught to call the milder cases congenital pityriasis, and to wait for the rare examples of severe disease before venturing upon that of Ichthyosis. Such custom is, however, as little reasonable as if we were to insist on calling nothing 'Ale' but the best Edinburgh, and should invent a new name for the home-brewed article."

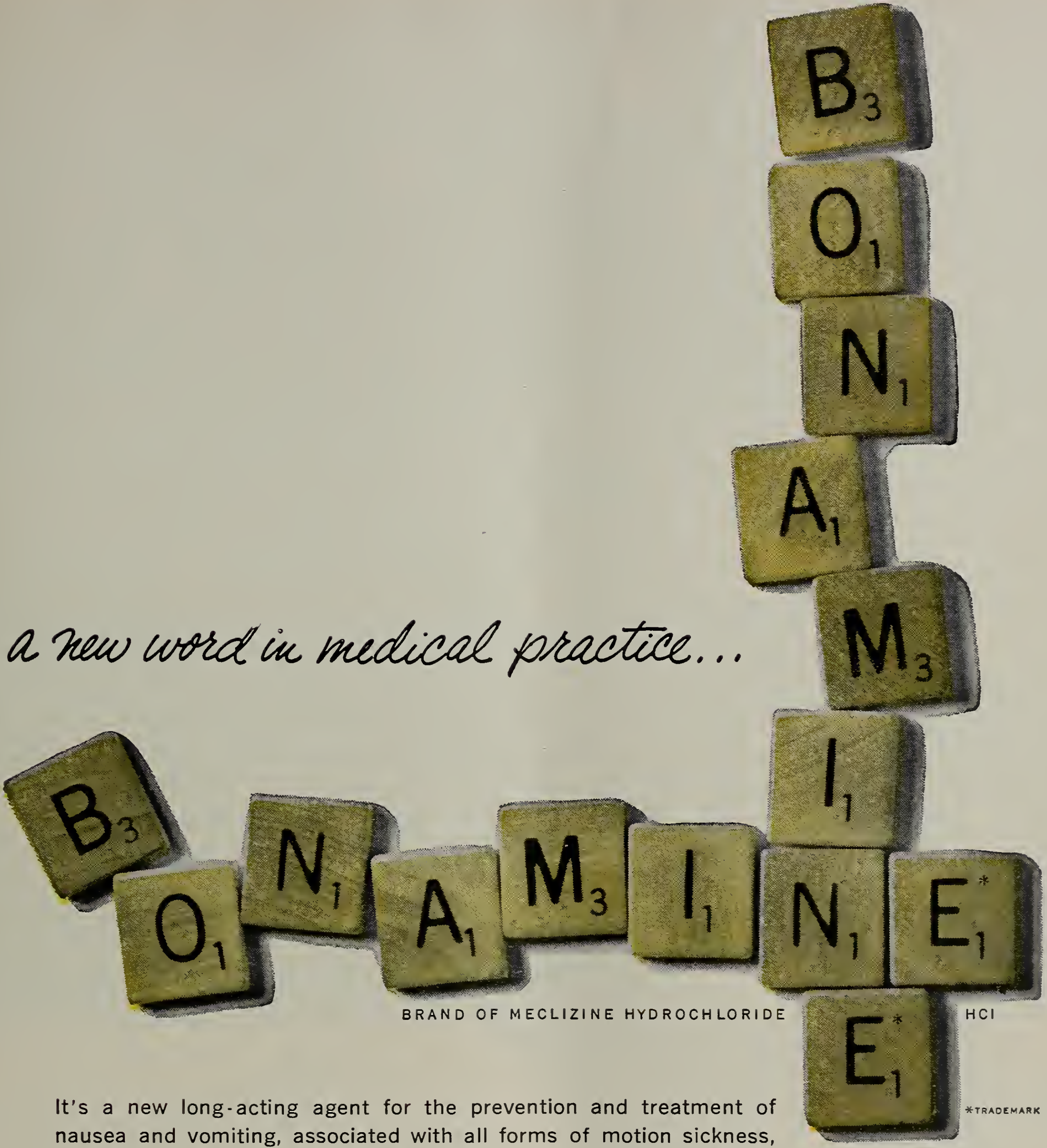
Listen also to the opening sentence of a lecture on eruptive angeiomata delivered by Sir Erasmus Wilson in 1869:

"A publican, aged 30 years, had for some time yielded to the temptation of his calling, and had thereby injured his health, when he was suddenly attacked with epistaxis."

You will remember that Erasmus Wilson, F.R.C.S., turned to dermatology about 1840 at the suggestion of Thomas Wakley, editor of *The Lancet,* who advised him to link himself so closely with skins that, the moment he entered a room, all those present would start scratching themselves. In 1870 he established at the Royal College of Surgeons of England a chair of dermatology, which with becoming modesty he was the first to occupy for eight successive years.

Let us for a change cross over to France to meet

Read at the annual meeting of the British Association of Dermatology at Cambridge, England, on June 24, 1954.



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Jean Louis Alibert, a magnificent speaker bubbling over with wit, irony and caustic metaphor. In his clinics which resembled theatrical productions, a syphilitic prostitute became "a priestess of Venus wounded by a perfidious dart of love."

And then there was fashionable, opulent, superb Philippe Ricord, described by Oliver Wendell Holmes as the "Voltaire of pelvic literature . . . a skeptic as to the morality of the race in general, who would have submitted Diana to treatment with his mineral specifics, and ordered a course of blue pills for the Vestal virgins."

In Vienna Ferdinand Ritter von Hebra attracted from far and wide students and practitioners who eagerly imbibed his witty and pungent aphorisms. Picture him lecturing on a case of acne disseminata:[3]

"There are cases enough of persons of each sex addicted to excessive venery, who exhibit not a trace of acne. . . . On the other hand, we find the skin of the face, chest, and back sometimes perfectly clear, sometimes covered with eruptions thick as the starry heavens, in those who are unmarried and have never practised onanism . . . in course of time, this influence of the sebaceous glands and hair-follicles . . . will reach its end, and that just as surely with bachelors and vestals as with married people."

Listen also to von Hebra on the subject of eczema (pp. 135-6):

"It has been asserted that the longings of pregnant women for highly seasoned dishes may be the cause of eczema in the new-born infant! . . . I have seen, on the one hand, those who lived the most respectable, regular and temperate lives, children and ladies who seldom or never took highly seasoned food or alcoholic drinks, attacked by this disease; while, again, I know those who have lived in exactly the opposite way, bonvivants grown grey in gluttony, and yet free from the slightest blemish."

While we are on the subject of eczema, do you know the story of the great American dermatologist, William Allen Pusey,[4] who, when asked by a patient how long it would take to rid him of his eczema, was in the habit of replying that he could not say, as he was neither a prophet nor the son of a prophet? On one occasion a woman who had just received her bill remarked: "You may not be a prophet or the son of a prophet, but I'll say you're a profiteer."

One hundred years ago there appeared in *The Lancet* (1854, *ii,* 32) a report of a remarkable case of "Epithelial Cancer Invading the Pinna of the Ear, After the Fall of a Horn, Developed upon a Wart in the Same Locality." The patient was at the London Hospital under the care of John Adams—incidentally the first name on the original list of Fellows of the Royal College of Surgeons of England. A genial man, he knew how to deal with rowdy students. When, as was usual, a disturbance arose in his class, he would suddenly bring down his fist like a sledge-hammer upon the table and shout: "If you don't stop this bloody row, I will close the lecture." The report begins thus:

"The museums of this and other countries contain preparations showing that a hair follicle in man may become endowed with a peculiar abnormal energy, which will give rise to the growth of a horny product, very little different, both in appearance and intimate structure, from the horns which form natural appendages with some of the lower animals. These strange deviations from ordinary nutrition, are remarkable for the vigour of growth and reproduction which they display, ablation being seemingly an encouragement to repullulation."

This report ends:

"The patient will not part with this striking illustration of irregular nutrition, and the memory of the case will be perpetuated in the museum of the hospital by a wax model."

Sir John Bland-Sutton possessed to a most striking degree the gift of epigrammatic expression and was addicted to inimitable quips.[5] Vaccination scars he once described as "eloquent records for passport officers." Referring to elephantiasis arabum, he said: "Drawings and photographs of men and women suffering from this disease illustrate, but they do not adorn, the pages of an atlas, or a textbook on diseases of the skin." One disadvantage of stark-nakedness, he felt, was the absence of pockets. Talking of nakedness, according to the June number of the *Middlesex Hospital Journal* (1954, *54,* 68) the editor of the *British Journal of Dermatology* is reported as having said on the topic of psoriasis: "Often the only inconvenience to the patients is that they can't take off their clothes in public."

For picturesque writing listen to this extract from an article, "The Personality Factor in Psychoneurogenous Reactions of the Skin" by J. H. Stokes of Philadelphia:[6]

"It must be apparent that in this succession of problems in personality there is ample material for a seriously disordered physical organization from the functional standpoint—that the cold sweat and the angry flush, the pale rage and the purple shame will play disastrously across a skin that packs such spiritual dynamite into the body it encloses."

Let me conclude this inconsequential, anecdotal talk with the anonymous New York dermatologist of whom it was said that, "while he was hell on a pimple, a boil was too much for him."[7]

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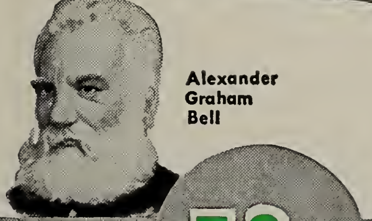

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Every man owes a part of his time and his money to the profession in which he is engaged.—Theodore Roosevelt.

Among Ourselves

(Editorially Speaking)

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"Put Up, or Shut Up"

The above quoted title is abrupt, brusque, inelegant and completely undiplomatic, but it packs a punch well understood by the street urchin and the savant.

The recent Public Relations Institute, staged by the A.M.A. in Chicago, illustrates the significance of this succinct quotation very aptly. So often, members of the A.M.A. gripe about medical matters, and instead of crystallizing their true thoughts (if any) into tangible action, they shoot off steam, then relax, and say, "I wonder what *they're* going to do about it?"

The announcement of this public relations meeting included a formal program which obviously had been developed so as to permit of free and informal discussion, not only by the participants, but also by others present. The announcement also included a loose page which promised that "At a special Thursday afternoon session, top A.M.A. officials and department heads will be on hand to listen to your ideas . . . you will have an opportunity to ask questions, make comments. . . ."

After this wide-open invitation to participate, the same page requests, "1. What constructive criticisms do you have regarding A.M.A. services to State and County Medical Societies? 2. What can the A.M.A. do to improve such service?"

Could anyone, in any way, do anything, to make more explicit or implicit their desire to improve on a service to its members?

Obviously, at such a meeting there will be some, perhaps a number, who will come away disappointed because their pet peeve wasn't discussed at a length to their satisfaction, some folks are repetitious and long-winded, and it takes them all day to say nothing, reiterated to the *n*th degree (the "n" stands for nausea). Others, at such a meeting come away disgruntled because their gripe or grouch wasn't settled *right now*, shooting from the hip!

However, such a session is certain to accomplish some good, it's bound to bring out what everybody's thinking, if they are present and have guts enough to stand up and be honest about their convictions.

Most important of all, it nails to the cross those hospital gab-fest oracles who, in their ignorance, spout off so much about so little. Such conferences, open to all who have some burning crisis or crusade, kinda remind us of the above-quoted country boy saying, "Put up or shut up."

Vincent T. Williams, M.D.

Now

We have gone through several years of drought—during which time we have had to endure almost unbearably high temperatures—and, also, what is worse, we have had to go without rain. Farmers have been frustrated and sometimes ruined and cities have worried about their water supplies. We suddenly realize what it is to have had nice, reasonable, comfortable weather conditions which were contributive to production of wealth and prosperity. We never have realized previously our good fortune and blessings until we were suddenly deprived of them. All this deprivation we could not prevent—the only thing we can do is to bear the resulting conditions and look forward to a return to former climatic conditions.

At the present time we still have the threat of state medicine and don't think we do not have this threat. On all sides we hear complaints of exorbitant fees and difficulty, even impossibility, in getting a doctor. Many, indeed most of these complaints, are groundless, ill-founded, false or else grossly distorted. What few are true we do not know. But the complaints, be they groundless or distorted, are believed by the general public just as implicitly as are the justified complaints.

Over the past twenty years various administrations have tried, for their own selfish reasons, to undermine us in preparation for state medicine, the keystone of the arch of a socialized state. The public has thus been conditioned against us. We doctors as individuals are doing little to combat this threat. Some day we may suddenly find ourselves deprived of the present free enterprise method of medical practice. If that time comes we shall longingly look back on today's freedom. Unfortunately we will not be able to change then —but we can prevent that catastrophe now if we only try.

Read, "Doc, We Need Each Other" by Reverend Roy Fields, in the July issue of the *Greene County Bulletin.* F. T. H'DOUBLER, M.D.

A True Cancer Detection Center

Much has been written about hematuria and the importance of cystoscopic examination to determine its origin. The most dreaded etiology of hematuria is, of course, cancer, although other serious pathologic lesions may produce it. Gross hematuria, if accompanied by no other symptoms, may well prove to be a fatal sign, particularly in the elderly patient. It may already be too late for any other than radical treatment. This so-called silent hematuria is usually a product of advanced malignancy. Hopes of a cure in the mind of the urologist may be shattered even before a cystoscopic examination is performed.

How much better it would be for the patient and all concerned if malignant lesions of the urinary tract could be detected early, possibly in their premalignant stage. The truth is that many times these lesions do give early evidence of their activity and a simple laboratory test might point to their presence. No, not by the Papanicolaou test. A positive finding here would be indicative of an already existant malignant lesion. Occasionally an early cancer is discovered during routine cystoscopy for exclusion of the urinary tract in differential diagnosis. This is, of course, satisfying to the urologist and of great importance to the patient. But the real thrill of cystoscopy is evidenced when an early papilloma is found only because microscopic hematuria was discovered on routine urine analysis. Mind you, no urinary symptoms, just microscopic hematuria.

A conscientious microscopic examination of urine in all patients in the cancer age who visit the doctor's office should become a routine. I am convinced this would lead to earlier diagnosis of urinary tract malignancies, earlier treatment with a resultant much more favorable prognosis.

The general practitioner whose finding of microscopic hematuria results in a final diagnosis of benign papilloma or grade one carcinoma of the urinary tract deserves the plaudits of his patients. His office is truly a cancer detection center.

MARTYN SCHATTYN, M.D.

Surgery in Thyrotoxicosis

As pointed out recently by Fahrni of Vancouver, the introduction of the newer drugs, such as the thiouracil compounds and others, in the treatment of thyrotoxicosis, has apparently produced in the minds of some physicians the misconception that surgery is no longer the treatment of choice in Graves' disease or toxic adenoma of the thyroid gland. In some instances, this fake concept has led to months of therapy, with its attendant dangers and cardiac damage (due to delay) before both the physician and the patient become convinced that surgery is indicated. True, where surgery is contraindicated for any reason, then the antithyroid drugs have a place as "next best" treatment.

I have noted in rural Missouri a tendency to treat hyperthyroidism medically and we have seen several cases of agranulocytosis and some bad hearts from recurrent hyperthyroidism.

Attention should also be called to the masked hyperthyroidism of the elderly which has been well stressed by the late Doctors Frank Lahey and George Crile. It is not uncommon to see the so-called nontoxic, nodular goitre, with a normal or even a low metabolic rate presenting auricular fibrillation and congestive failure, having been treated over the months by rest, digitalis and diuretics without recognition of the underlying disease of the thyroid gland.

AVERY P. ROWLETTE, M.D.

Fraternally Yours

Not Surprising

A young colleague the other day was moaning because at the funeral of his beloved preceptor, so few erstwhile associates and "friends" of the deceased showed up. He explained at great length his disappointment that a mere handful attended these last rites, and displayed some bitterness that so many medical confreres were notable by their absence.

This situation is not surprising. Through the years observation forces the conclusion that whether the attendance at a funeral is large or small, the number of real, true friends a man has invariably is small! When you get right down to it, a physician (or, for that matter, anyone else) may have a large sphere of back-slappers, fellow-golfers, fellow-lodge members, fellow-drinkers, fellow-social friends, perhaps numbering into the hundreds or thousands, but the few "who will go through hell and high water" are pitiably meager.

This comes out on those rare occasions when a man is low, and most everybody seems eager to kick him down even lower. Those who come forward at such times are the only ones who may correctly be considered as worthy of the meaning "friend." Our young colleague will learn as he gets older!

Tuberculosis Among Food-Handlers

Considerable consternation recently was expressed in news releases from two metropolitan areas in which the health authorities apparently discovered something suddenly, which has been well-known for many, many years to the average alert physician who keeps his eyes open. The somber, macabre note of alarm voiced in these communiques stems from the fact that food-handlers in large cities have a disproportionately high incidence of tuberculosis.

Food-handlers (specifically, we refer to dish-washers, bus-boys, waiters, waitresses, "fly-cooks") are not well paid occupations. Actually, most any tramp or habitue of "skid-row" almost invariably can get such a job in any city. Sure enough, many urban areas require "periodic health examinations." To a great degree these are a farce, and, as carried out, worthless. Perhaps for this reason most leading public health authorities either have condoned their outright abandonment, or view their continuation without any hearty approval.

Because of the low economic standards and an equally low hygienic level, we are not at all surprised at this apparent bombshell which has caused the city fathers of Chicago recently to make mandatory chest x-rays of food-handlers. It's about time such a practice is established everywhere!

Honestly, Surprised?

We were talking to a colleague the other day about how physicians react when the volume of business is off, and at about the same time we read in the superb *Greene County Medical Society Bulletin,* an excellent editorial which illustrates one facet of this reaction. According to this writer, he warns his readers not to bare the fangs of competition too publicly. It's bad, he warns, to let the public see physicians so grasping, so cut-throat, to their colleagues in times of lessened patient-volume.

An admirable thesis indeed! It has been our observation for years that many physicians do their best work, give their most efficient and scientific efforts, when the heat is on, when they are over-worked. When the patient-load drops markedly, too often a physician (perhaps subconsciously) gets that scintilla of worry, much as the female beauty does when the first few wrinkles and crow's-feet appear. She may know she hasn't gotten ugly over-night, but the tell-tale evidence greets her daily that she ain't what she used to be, and her ego sags . . . perhaps plummets. Similarly, the medic may hear that ugly little voice in the back of his head, which says, "Business is off a little . . . quite a little. Of course, all the other boys are squawking, too. Or could it be it's me that's slipping? I don't think so, but maybe . . ." And, then this ugly little thought ferments, and stews, and festers, and our medic becomes just a little more nervous, irritable, and isn't relaxed and mentally on the job. Perhaps he's a little hasty of speech and in his medical judgment, perhaps his whole inner-being is out of focus.

Our observation in the past agrees absolutely with the warning given out by the *Greene County Bulletin* editorialists; let's not get too eager or too grasping when the work-volume drops!

Missouri Medical Meetings

Southern Medical Association, St. Louis, November 8-11, 1954.
St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.
Kansas City Southwest Clinical Society Conference, Municipal Auditorium, Kansas City, October 4-7, 1954.
Missouri Academy of General Practice, Governor Hotel, Jefferson City, October 27, 28, 1954.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.
Barton-Dade County Medical Society—third Wednesday of each month.
Benton County Medical Society—meets only on call.
Boone County Medical Society—first Tuesday of each month.
Buchanan County Medical Society—first Wednesday of each month.
Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.
Callaway County Medical Society—third Thursday of each month.
Cape Girardeau County Medical Society—first Monday of each month.
Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.
Clay County Medical Society—last Tuesday of each month.
Clinton County Medical Society—meets only on call.
Cole County Medical Society—first Monday of each month.
Cooper County Medical Society—first Monday after the 15th of each month.
Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.
Dunklin County Medical Society—first Tuesday of each month.
Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.
Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.
Greene County Medical Society—fourth Friday of each month.
Henry County Medical Society—meets only on call.
Holt County Medical Society—meets only on call.
Howard County Medical Society—meets only on call.
Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.
Jasper County Medical Society—second Tuesday of each month, September through May.
Jefferson County Medical Society—meets only on call.
Johnson County Medical Society—meets only on call.
Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.
Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.
Lewis-Clark-Scotland County Medical Society—meets only on call.
Lincoln-St. Charles County Medical Society—third Thursday of each month.
Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.
Miller County Medical Society—meets only on call.
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.
Moniteau County Medical Society—second Thursday of each month.
Newton County Medical Society—meets only on call.
Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.
North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.
Pemiscot County Medical Society—third Thursday of each month.
Perry County Medical Society—second Thursday of each month.
Pettis County Medical Society—third Monday each month September through May.
Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.
Pike County Medical Society—third Tuesday of each month.
Platte County Medical Society—meets only on call.
St. Louis County Medical Society—second and fourth Wednesday of each month.
St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.
Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.
South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.
Vernon-Cedar County Medical Society—meets only on call.
Webster County Medical Society—meets only on call.
West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

The "Biggest" and, according to most Fair authorities, the "Best" Annual Missouri State Fair came to a close Sunday night, August 29, after nine days of "sweat, dust and excitement." Variety was a keynote—sights and interests for young and old. Some 500,000 people made up this year's attendance. They represented most "walks" of life and were of all shapes and sizes. Their interests seemed to approximate their numbers. It appeared that most of them had one thing in common—"What's free around here?" That seemingly common feeling made it easier to interest many of the visitors in health exhibits and to place educational literature in their hands. They must have carried it away with them as little appeared scattered around the grounds.

Exhibit shown at the State Fair.

The Health and Public Instruction Committee of the State Medical Association displayed an exhibit entitled "Your Heart." This display was secured from the Bureau of Exhibits of the American Medical Association and is a high caliber public information dispenser. A picture of the exhibit appears herein. That folks are much interested in heart disease is nothing new to

(Continued on page 852)

Members in the News

At Hickory Hills Country Club, **Fred Coller**, M.D., Springfield, won top honors in the Seventh Annual Greene County Medical Society Handicap Golf Tournament.

After forty years in practice in the greater Kansas City area, **F. L. Laffoon**, M.D., Raytown, has retired and moved to Vista, California. He is succeeded in practice by **R. K. Russell**, M.D., and **H. L. Biggs**, M.D.

Henry Hardwicke, M.D., submitted his resignation as Director of the new Clay County Health Center, Liberty, after serving in that post since February 1.

Three Kansas City physicians and their families toured Europe during mid-summer. They are **Evan S. Connell**, M.D., **Luke E. Williams**, M.D., and **Esther Winkleman**, M.D.

In addition to the several osteopathic hospitals now recognized by the St. Louis Blue Cross, three Kansas City osteopathic hospitals were recently listed by Kansas City Blue Cross authorities.

After practicing 56 years, 54 of them in Putnam County, Missouri, **J. H. Holman**, M.D., has established something of a record recently, when he administered to the needs of five generations in one call, at one house. In addition to practicing medicine, Dr. Holman is president of the Farmers' Bank of Unionville.

Retired Mexico physician, **P. E. Coil**, M.D., recently was honored by the Knights Templars, when he was presented with a forty-year membership certificate. The presentation was made by Walter J. Eddleman, Jefferson City, Grand Commander of the State Commandry.

Our well known past president, **Arthur Bristow**, M.D., proudly announces the association of his son, Ben, who is the fifth member of his family, and the third generation member to practice medicine. Dr. Ben Bristow's brother, **Robert Bristow**, M.D., is a well known St. Joseph urologist.

John J. Hill, M.D., Eldorado Springs, has closed his office after six years, and has joined the Air Force Medical Corps, at Carswell Field, Ft. Worth, Texas. Doctor Hill was the only practicing physician at Eldorado Springs, and no definite replacement has been made.

For his outstanding work in training Negro physicians, **Robert Elman**, M.D., St. Louis, was honored at a testimonial dinner in Washington, in mid-August. At the dinner, Dr. Elman was presented with a wrist watch from the "alumni" of the Homer G. Phillips Hospital, St. Louis, where for nearly sixteen years he has been Chief of Staff and Director of Surgery. He was praised for his "gracious humility, as well as his leadership in major scientific achievements."

The *Maryville Democrat Forum* gave **C. W. Kirk**, M.D., Hopkins, a nice writeup recently with a picture of his great-granddaughter, his granddaughter and his daughter, all of whom he delivered.

Henry E. Oppenheimer, M.D., St. Louis, has been appointed governor for the State of Missouri of the American Diabetes Association. At a recent meeting of the board of governors Dr. Oppenheimer was elected secretary of the board.

Norman Tobias, M.D., St. Louis, gave a lecture on July 19 before the Turkish Dermatological Association in Istanbul, Turkey, on "Modern Approach to Dermatological Problems."

Returning to survey the cerebral palsy program which he assisted in establishing in 1952, K. C. physician **Robert E. Bruner**, M.D., spent several days in Charlotte, North Carolina in mid-summer.

The Lafayette-Ray County Medical Society meeting in Lexington heard **Erich A. Quer**, M.D., Kansas City, speak on "The Differential Diagnosis of Masses in the Right Lower Quadrant."

After a three-months' tour of Europe, Dr. and Mrs. **Edwin H. Schorer** have returned to their home in Kansas City.

At Little Rock, Arkansas, the National Association of Coroners elected **Hugh H. Owens**, M.D., Kansas City, first vice president.

At the Strand Hotel, Chillicothe, the Grand River Medical Society and Woman's Auxiliary heard K. C. cardiologist **A. Graham Asher**, M.D. discuss "This Matter of Hypertension."

Two Kansas City physicians spoke at a dinner meeting of the West Central Missouri Medical Society and Woman's Auxiliary in Nevada. **William W. Gist**, M.D. spoke on "Surgical Management of Varicose Veins," and **John S. Knight**, M.D. on "The Management of Some Common Ear, Nose and Throat Conditions."

Following his recent return from the Navy, **Robert S. Brown**, M.D., Kansas City, has associated with

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Gerald L. Miller, M.D., in the practice of obstetrics and gynecology.

Also recently discharged following his second tour of duty in the Navy, **Donald K. Piper**, M.D., has resumed practice in Kansas City.

At Toronto, **E. H. Trowbridge, Jr.**, M.D., Kansas City, attended the Fifth International Congress on Mental Health.

In mid-summer, **Hugh Hamilton**, M.D., Kansas City, spoke to the Lafayette-Ray County Medical Society in Lexington on "Iron Metabolism in Pregnancy."

Although an amateur, Morven Curran, D.D.S., Kansas City, won third place in a handicap race at the Seabrook Sail Boat Regatta in Galveston Bay.

The Council of the Greene County Medical Society has recommended the fluoridation of the water supply of Springfield. Copies of the resolution were forwarded to appropriate authorities.

At the St. Louis Air Reserve Center, a Reserve Medical Flight unit has been activated. Lt. Colonel R. J. Morse, Commander of the Flight, has announced that there are openings for both physicians and nurses with prior experience and qualified enlisted medical technicians.

NEW PHYSICIANS LOCATED IN MISSOURI

From Barnes Hospital, St. Louis, to the Boonville medical group, D. Hata, M.D.

From Hannibal, to join R. B. Wray, M.D., in Nevada, Louis P. McCann, M.D.

From Nebraska University Hospital at Omaha, to associate with James L. Coffey, M.D., Fairfax, J. Heath Coffey, M.D.

From St. Louis University, to associate with Robert W. Smith, M.D., Marceline, George Gary, M.D., who will replace Paul T. Berry, M.D., who has been recalled to the service.

From the Deaconess Hospital in Spokane, Washington, Randal Ochs, M.D., to practice in Wheaton.

From Colorado, Mary Frantz, M.D., is assisting E. L. Washington, M.D., Columbia, in the absence of Charles Scheuber, M.D., who has gone into military service.

From the Army Medical Corps, D. H. Geisler, M.D., is with the staff at Ellett Memorial Hospital, Appleton City, replacing Donald C. Niederlueche, M.D., who has joined the Air Force.

From the Army Medical Corps, Ralph L. Nicholson, M.D., is now with Drs. Robichaux and Sanders, Excelsior Springs.

From St. Luke's Hospital, St. Louis, Robert L. Ward, M.D., has moved to his new eight room office building, Centralia.

From the Army Medical Corps, Elmer Stegman, M.D., is now located with the Raytown Clinic.

From St. Louis City Hospital, Charles R. Johnson, M.D., has opened his office in Monroe City. (The news item credits the Missouri Medical Association as being instrumental in persuading him to locate in Monroe City.)

From Kansas City General Hospital, G. R. Weeks, M.D., is now associated with F. L. Martin, M.D., Nevada.

From Linville Memorial Clinic, Columbia City, Indiana, Paul E. Kratz, M.D., in practice with D. B. Elrod, M.D., Cape Girardeau.

From Monroe Charity Hospital, Monroe, Louisiana, M. L. Fowler, M.D., will open his offices in the former Bohrer Clinic, which was operated by a number of years by the late Claude Bohrer, M.D., West Plains.

From the Brooks General Hospital, San Antonio, Rene J. DuMontier, M.D., has opened an office in O'Fallon.

Cape Girardeau physicians, O. L. and Wm. Seabaugh, have announced their association with Fred Rawlins, M.D., who recently completed a residency in obstetrics and gynecology at the St. Louis City Hospital.

In a practice limited to internal medicine, Robert K. Skillman, M.D., has become associated with Kansas City physician, Philip L. Byers, M.D.

After completing a residency in internal medicine at Jefferson Barracks Veterans Hospital, Richard Koehle, M.D., has begun practice in Carthage.

Robert McGee, M.D., Springfield, has decided to locate in El Dorado Springs. He will occupy the office lately used by John J. Hill, M.D., who joined the Air Force.

Brian A. Michaelis, M.D., from Fredericktown for the past three years, to Poplar Bluff. As replacement in Fredericktown, will be his brother, Charles E. Michaelis, M.D., who finished his St. Louis City Hospital internship in June.

MISSOURI HOSPITAL ACTIVITIES

Within a year Cameron expects to have a new hospital; the contracts have been signed; the cost estimated to be around $200,000 for the 24-bed community structure.

The drive for a $700,000 addition to the Southeast Hospital, Cape Girdardeau, got off to an assuring start.

A new wing is under construction at the McCune-Brooks Hospital, Carthage.

The West Plains Hospital Planning Committee contemplates a new hospital structure similar to the 54-bed, half-million-dollar Milan Hospital.

Albany Memorial Hospital Association plans a fund-raising campaign, with local donations anticipated to reach $180,000.

North Kansas City has named a five-member Board of Trustees for the North Kansas City Municipal Hospital.

Ray County voters (Richmond) approved a $497,000 bond issue, for the erection of a new hospital.

The opening of the new wings of the Chillicothe Municipal Hospital was held in early September.

The Gay Medical Center of Richmond was opened early in August, with E. E. Gay, M.D., and George DeVault, M.D., as the physicians.

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IN MEMORIAM

Jesgar, William, M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1936; member of the St. Louis Medical Society; aged 45; died July 12.

Newlon, John S., M.D., Nevada, a graduate of the University Medical College, member of the West Central Counties Medical Society; aged 71; died July 13.

McAdam, James D., M.D., Salisbury, a graduate of the Missouri Medical College, 1881; honor member of the Chariton-Macon-Monroe-Randolph County Medical Society; aged 97; died July 18.

Knox, Andrew C., M.D., Kansas City; a graduate of the Kansas City Medical College, 1899; honor member of the Jackson County Medical Society; aged 80; died August 9.

McAlester, Andrew W., Jr., M.D., Kansas City, a graduate of the University of Missouri School of Medicine, 1905; Past President of the Missouri State Medical Association; honor member of the Jackson County Medical Society; aged 78; died August 17.

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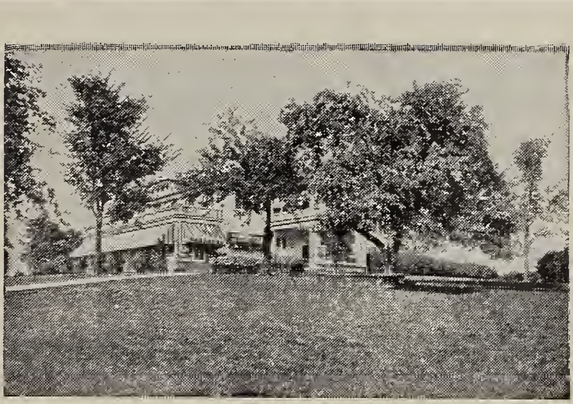

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News From the Medical Schools

ST. LOUIS UNIVERSITY NEWS

Seventieth General Hospital Reunion: The reunion of the 70th General Hospital (St. Louis University unit), September 4-6, at the Jefferson Hotel, St. Louis, was called a big success. This group served primarily in Italy and Africa and received several citations during World War II. Commanding Officer was Dr. Curtis H. Lohr, Administrator of St. Louis County Hospital. Dr. Romie H. Miller, Jr., D.D.S., was Chairman.

Registration was on Saturday, September 4, from 3 to 6 p.m. at the Hotel Jefferson, preceding a cocktail party and reception. The evening was devoted to a boat ride on the Steamer Admiral.

On Sunday morning, the Very Reverend Harry B. Crimmins, who resigned as President of St. Louis University to become Chaplain for the 70th Hospital, celebrated Mass at St. Francis Xavier (College) Church at 11 a.m.

Sunday evening there was a dinner-dance at the Crystal Room of the Hotel Jefferson with Russ David's orchestra. On Monday afternoon, Dr. R. D. Woolsey was host to a picnic and barbeque at his home.

The weekend of the reunion marks the tenth anniversary of some of the greatest allied victories in World War II. During that week ten years ago, Pisa fell to the Fifth Army in Italy (the Army to which the 70th General Hospital was attached); General Patton's Third Army was driving through Verdun and St. Mihiel; the British Eighth Army crashed through the Gothic Line and was threatening the Po Valley; American troops occupied Lyon in France while three allied divisions were making strides in southern France; and most of Belgium had been freed from the Germans.

WASHINGTON UNIVERSITY NEWS

Enlarged Library: A doubled seating capacity of the W. U. School of Medicine library has been completed with a seating capacity of 126, compared to 51, located on the second floor of the North Building, directly above the old library.

It is air-conditioned and lighted by concealed fluorescent ceiling lights. There are two specially constructed student conference rooms, a faculty reading room and the Beaumont room, housing the original material of Dr. William Beaumont, given to the Medical School in 1915, by his granddaughter, L. Beaumont Irwin.

W. U. Well Represented: Seventeen staff members of W. U. School of Medicine participated in the Third International Gerontological Congress in London, in July. According to the London headquarters, the Medical School's delegation was the largest from any country.

We Lecture: Dr. Edward Dempsey, Professor and Head of the Department of Anatomy, participated in several round-table discussions at the Symposium on the Comparative Endocrinology of Vertebrates at the Department of Zoology of The U. of Liverpool, England, with two lectures in London during July. He also spoke before the CIBA Foundation, and at the St. Mary's Hospital Medical School.

Dr. Lauren V. Ackerman, Professor of Pathology and Surgical Pathology, was one of 28 scientists from the U. S. selected by the National Research Council to attend the Sixth International Cancer Congress, in July, at São Paulo, Brazil. Dr. Ackerman participated in a panel discussion, speaking on "Implantation of Cancer—An Avoidable Surgical Risk."

Dr. E. V. Cowdry, Research Professor of Anatomy, and Director of Wernse Cancer Research Laboratory, went to Tel Aviv, Israel, in June, to discuss that country's cancer research at the invitation of Israel's Minister of Health, Dr. B. Neumann. Dr. Cowdry received the $1,000 Bobst Award and Plaque on July 22, in London; this annual award is made for outstanding research in geriatrics.

UNIVERSITY OF MISSOURI NEWS

Faculty Activities: Dr. Robert Keller has been appointed Instructor in Microbiology and Miss Betty Crim as Instructor in the School of Nursing.

Dr. W. A. Sodeman, Professor and Chairman of the Department of Medicine, attended a National Conference on Teaching Methods in Heart Disease, Cornell University, and a Regional Conference on Communicable Disease Control held by the Kansas City District of U.S.P.H.S., Excelsior Springs, both in June.

On July 15, Dr. Hugh E. Stephenson, Jr., Assistant Professor of Surgery, discussed "Cardiac Resuscitation" at the weekly Thoracic Conference of the Peter Bent Brigham Hospital, Boston, Mass.

Dr. M. D. Overholser, for many years Professor and Chairman of the Department of Anatomy, had a successful corneal transplant performed by Dr. Derrick Vail, Northwestern University, in July. He is now convalescing at his home.

Graduation: At Commencement Exercises in August, Mr. George P. Williams received a B.S. Degree in Medicine, and Miss Rose Brodsky and Miss Verna A. Rhodes received B.S. Degrees in Nursing.

Postgraduate: Various members of the Faculty will again conduct Postgraduate courses. The first was held at 8:00 p.m., room 216, McAlester Hall, September 23, and each Thursday evening of November, December, January, February and March, in cooperation with the Missouri Academy of General Practice.

The Medical School Staff is acting as the Faculty for the Greene County Medical Society Postgraduate Course in Medicine and Surgery at Springfield, on the third Wednesday of each month, October through March, with afternoon and evening sessions.

School of Nursing: The School of Nursing has its own TV program, held each Tuesday afternoon at 4:30 p.m. These programs deal with health education, home nursing, first aid.

NEW MEMBERS

Barry, John W., M.D., Kansas City
Black, Don A., M.D., Kansas City
Cashman, John W., M.D., Kansas City
Eisemann, Gustave, M.D., Kansas City
Johnson, John E., M.D., Kansas City
Lais, Lyman W., M.D., Kansas City
Mowry, Gerald L., M.D., Platte City
Post, J. P., M.D., Washington
Shireman, Kenneth L., M.D., Kansas City
Skillman, Robert K., M.D., Kansas City

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MISSOURI STATE MEDICAL SECRETARIES TO MEET

The Missouri State Medical Secretaries and Assistants Society will hold a state meeting in Jefferson City on October 9 and 10. The meeting will open with registration and dinner at the Colonial Tea Room on Saturday evening, at which John I. Matthews, M.D., Jefferson City, will speak on "Internal Medicine." And informal reception will follow.

Breakfast on Sunday morning will be at the Missouri Hotel and Mr. Gordon Smith, Missouri State Conservation Commission, will speak on "Conservation in Missouri." This will be followed by an executive board meeting and a general business meeting and adjourned for church.

Officers are, left to right, seated, Miss Catherine Rand, Kansas City, president-elect; Mrs. Mary Kay Shell, Fayette, president; Mrs. Betty Jean Jacobs, Joplin, vice president; Mrs. Bertha Rose Welch, Sedalia, past president; standing, Miss Mary Dehoney, Kansas City, treasurer; Mrs. Edna Williams, Springfield, recording secretary; Mrs. Etta Young, Kansas City, board of censors; Mrs. Eleanor Carey, St. Louis, board of censors; Mrs. Helen Middleton, Columbia, corresponding secretary; Mrs. Rose Reynolds, Springfield, board of censors.

H. E. Petersen, M.D., St. Joseph, President of the Missouri State Medical Association, will be the principal speaker at a luncheon at 12:30 p.m. at the Missouri Hotel. A skit, "Practice-ly Yours," will be presented by members of the Jefferson City society. Guests at the luncheon will be members of the Cole County Medical Society and their wives.

KANSAS CITY SOUTHWEST CLINICAL SOCIETY

The annual fall clinical conference of the Kansas City Southwest Clinical Society will meet at the Municipal Auditorium, Kansas City, October 4, 5, 6, and 7. Sixteen distinguished guests from the United States and Canada will participate in panels, conferences, seminars and luncheon quiz sessions. Color television and radio broadcasts will be presented by Kansas City physicians.

The second Edward Holman Skinner Memorial Lecture will be presented during the session by Hans Selye, M.D., Montreal, whose subject will be "Stress and Disease."

There will be a dinner with entertainment and dancing on the evening of October 5. There will be special entertainment for wives of physicians attending and a hobby show for both physicians and their wives.

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Letter to Missouri Medicine

A Tribute to Dr. H. L. Mantz

To the Editor:

"Pete" Mantz had many interests in medicine and the readers of this Journal will probably remember him for different reasons. All who knew him and his work must feel deeply the tremendous loss following his sudden death. My own tribute is based on knowledge of one part of his activities about which perhaps not many of his fellow physicians were aware.

In 1943 the state of Missouri, along with the other states, provided for the expanded activities of the Vocational Rehabilitation Service as authorized by the Barden-LaFollette Act which added physical restoration to the old law, then twenty years old, but limited merely to an educational or training program. With this new act it was obvious that physicians would be needed for the diagnosis and treatment of the disabled indigent in order to implement an adequate program of physical restoration. Standards were set up and a method of procedure adopted, but which permitted each state to carry its program on in its own way aided by a Professional Advisory Committee.

In Missouri the primary need for sympathetic, intelligent and efficient physicians was met (even with the medical wartime shortages then existing) by part time consultants, one for each six districts in the state. Dr. Mantz was appointed Chief Medical Consultant. He quickly demonstrated his leadership. In Kansas City he built up an efficient program by directing and guiding the work of the local workers in the Vocational Rehabilitation Service. This he did first by a sympathetic, yet scientific appreciation of the variety of help needed by these disabled citizens; second, by a wide and intimate acquaintance with the medical services and agencies available in his community and, finally, by developing a devotion of the workers to the final objectives of the program. As a result, considerable demands were made on his time at various rehabilitation conferences.

He demonstrated by actual performance how rehabilitation can be made to work without expensive buildings or equipment and without spending more than one afternoon a week of his own personal time. This pattern needs to be applied to many areas of rehabilitation with the objective of reducing the tremendous economic load of direct relief, of the staggering cost of housing the chronically ill, the mentally disabled and others, many of whom can be made into working, tax paying citizens instead of burdens to themselves, their families and their communities. Physicians can give the kind of leadership needed; Dr. Mantz showed one readily available way.

Robert Elman, M.D.

Mortality in Childhood

To the Editor:

A study of the mortality of young children sixty years ago and now should hearten old practitioners. Our young doctors know nothing about this old lamentable spoliation. Really, the extension of the span of life is chiefly due to saving the life of young children. (Geratrists take notice!) The high death rate of infants and children sixty years ago in metropolitan cities was awful. (I have referred to this in "From the Hills.") Here some statistics from the St. Louis Health Department will illustrate the past calamities and the present blessings.

In 1872 the total death rate in St. Louis was 20.8, one half of this was contributed by children under 5 years of age. (Look at the mounds of babies' graves in any of the old cemeteries). In 1880 the child mortality had decreased to 44 per cent of the whole. In 1892 (total death rate 20 per thousand) had fallen to 28 per cent of the total death rate. In 1895 the total death rate was 17, and the children's deaths (under 5 years) had dropped to 25 per cent of the whole number, that is one fourth of the total.

Now look at the figures for 1949—total death rate 11.2, and the child mortality one fourteenth (rate 7.7) of the total deaths. In 1950 the death rate of young children under 5 years of age had dropped to 7.5. We will not consider the etiologic factors in this letter. In fact, young parents years ago were persuaded to take the young children to the country. Moreover, breast feeding remained fashionable.

No wonder that the specialty of pediatrics was a successful and even lucrative practice. So many sick babies and young children!

Yet the death rate of the newborn infant remains high and has become the dominant field for pathology and prophylaxis. An intensive study in the last years has been undertaken by Dr. Bundeson and associates in Chicago. Every aspect of the whole problem is studied statistically and we hope will stimulate obstetricians and pediatricians to evolve protective procedures. Small hospitals, good "pernatalists" and breast-milk seem to me ideal to bring the infant wastage down to a rate of 20 (not 40!).

John Zahorsky, M.D.,
Steelville, Mo.

Crossroad Comments

(Continued from page 792)

patients actually like to call you out at night or on holidays and none would call you at all if they had a choice.

What's the answer? I don't know. But I think we could get closer to them if we could put ourselves in the place of the patient. I am sure we could have a different outlook if we all had to go through one experience when our children were sick in the middle of the night and we had no medical knowledge.

Medical Economics published a good article on the average fees charged by doctors throughout the states, what the patient actually pays might be a different story. Perhaps average fee schedules, published in our offices and in the local papers might be one answer. These could be adjusted to meet the situation after a mutual agreement with all concerned.

I find it's a mighty hard job for me to put a price tag on human misery.

Your country nephew,
Pete

Has Wine a Place in Your Practice?

Recent physiological and clinical research confirms its adjunctive value in the diet of many patients

THE WIDE recommendation of wine as a gentle and pleasant stimulus to appetite, digestion, and the full enjoyment of a meal, has a sound basis in the findings of controlled research.

Results of some recent studies* are the following:

Influence of Wine on Appetite—Two wineglassfuls of 20 per cent alcohol (the concentration in the usual appetizer or dessert wine) have been found to relieve prolonged gastric tension. Two or three ounces of dry table wine can markedly increase the olfactory acuity and the appetite in anorexia, and stimulate caloric intake.

The Buffer Action of Wine in Digestion—The effect of wine on free and total gastric acidity is slower and more prolonged than that of plain alcohol. Because of the buffering action of its phosphates, organic acids and tannins, wine induces a less violent but more sustained increase in gastric secretion and gastric motility.

Wine Stimulates the Flow of Pepsin—Ingestion of moderate amounts of wine, notably white table wine, has been found to increase appreciably not only the volume but the proteolytic power of gastric juice.

Wine in the Diet of Oldsters and Convalescents—There are sound, physiological reasons, therefore, why the generally lax and achlorhydric stomach of older people and convalescents reacts favorably to the mild, secretory stimulation of wine taken at mealtimes. And wine offers other valuable vasodilating, soothing, relaxing effects . . . a little Port or sherry wine at bedtime is a valuable aid to normal sleep, and may obviate the need for sedative medication.

Wine to Brighten the Monotonous Diet—In the dull and often unappealing dietary regimen of many patients, a glass of wine can frequently provide a touch of interest and "elegance"—a psychological boost of inestimable value.

The Fine Wines of California—Wines of outstanding quality are coming from California nowadays. Somewhere in the rich soils of the State, each grape variety finds its ideal setting and comes to perfect ripeness each year. Just as essential, modern scientific methods result in wines of controlled quality standards, true to type—and what is highly important from your patient's standpoint—moderate in price. Wine Advisory Board, San Francisco 3, California.

*Research information on wine is available upon request.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

After a routine examination, I asked a patient who complained of having "missed her periods" for two months, "Don't you think you might be pregnant?"

"Oh no Doctor," she assured me, "I couldn't be. I use a diagram."

Seen on one of the charts at the local hospital. "She was at 2 months jestation."

One of my OB patients brought her 3 year old son with her on one of her office visits.

"Well, Johnny," I inquired, "What do you want me to bring you—a little brother or a little sister?"

"Neither one," he replied, "I want a puppy."

"Whew," sighed the proctologist, "Today was really a tough one at the orifice."

Overheard in the reception room: 1st Lady: "Have you heard about Marie having twins?" 2nd Lady: "No, I didn't." 1st Lady: "Yes it was quite a surprise. Her Doctor told her that it only happened once in every 15,781 times." 2nd Lady: "My goodness! How do you suppose she ever finds time for her housework."

The present controversy over the harmful effects of tobacco reminds me of a ditty I learned when I took the pledge many years ago. It goes like this.

"Tobacco is a filthy weed
'Twas the Devil who sowed the seed
It robs your pockets, scents your clothes
And makes a chimney of your nose."

I know a Doctor in this locality who has so many kids that when he comes home he's afraid to ask "What's new?"

Musings

(Continued from page 837)

doctors but the interest shown, by young and old, in this particular display seemed unusual. Most of those who visited the booth helped themselves to the free literature accompanying the exhibit.

The annual fall meeting of the Missouri Health Council will be held Monday, October 11, at the Student Union Building, University of Missouri, Columbia.

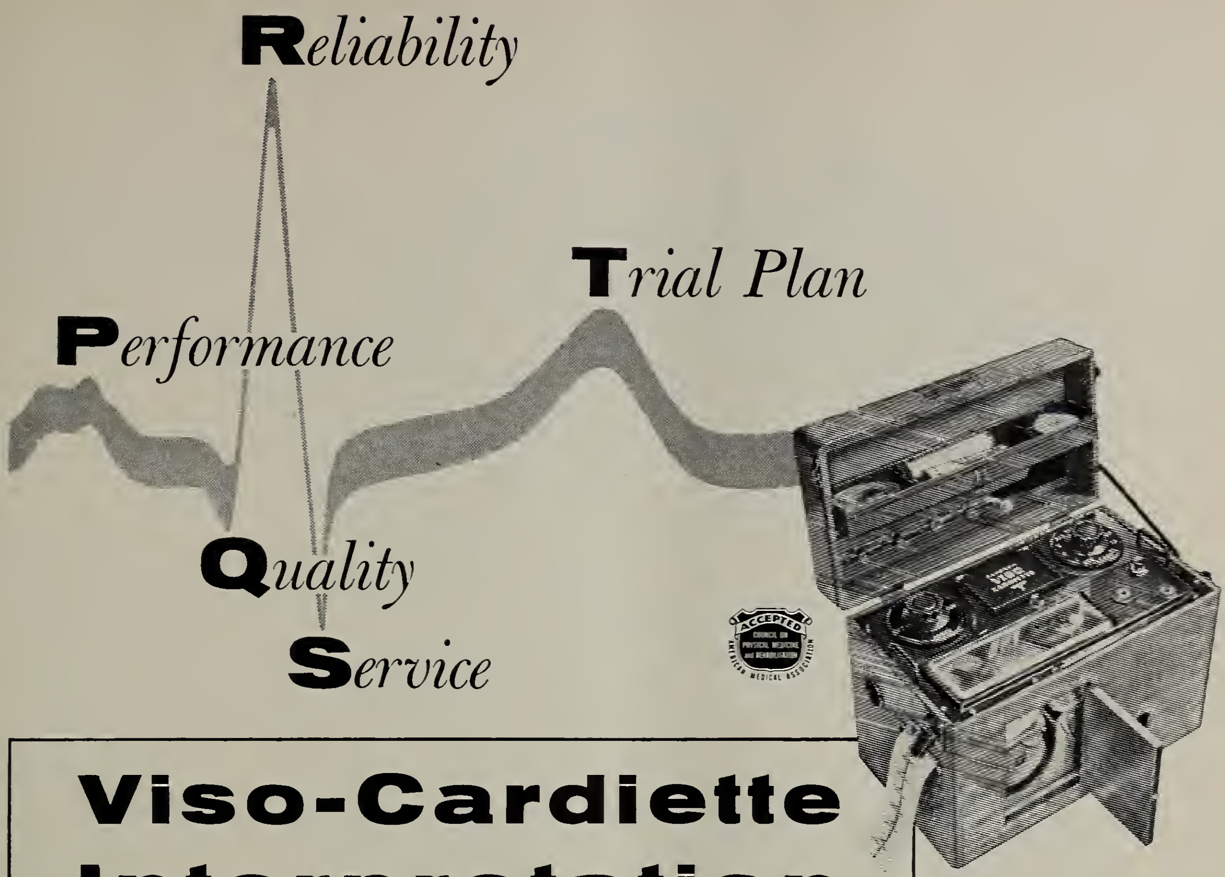
Many people visited the exhibit.

The program committee has secured Dr. Richard W. Poston, of the Southern Illinois University, Carbondale, Illinois, as the luncheon speaker. Dr. Poston has a most enviable reputation in building community action to secure better health objectives and is a forceful speaker. The morning program will be presented by Dr. S. B. Beecher, of the Dunklin-Pemiscot County Health Center, and Mr. Kenneth Grubb, Health Educator of the Sixth District of the Missouri Public Health Service. These persons have been using a system of community committees with marked success.

The afternoon program will be used for a panel of persons who have been successful in community organizations. The regular business meeting for election of officers and member of the Executive Committee will follow the panel.

It is hoped that a good number of doctors may see fit to attend this meeting—to hear what's going on in the next pasture.

The annual meeting of the Missouri Academy of General Practice will be held at the Governor Hotel, Jefferson City, October 27 and 28. A business session will be held Wednesday morning, October 27, with the scientific program beginning at noon with a luncheon session. The annual banquet will be held Wednesday night. Thursday morning and afternoon again entail scientific sessions. The meeting will conclude at 4:00 p.m. Thursday evening. Four outstate speakers will appear on the program this year. They will each present two discussions. The Missouri Division of the American Cancer Society and the Missouri Heart Association are sponsoring two of these speakers. Dr. Wm. L. Watson, of Cornell University School of Medicine, will appear through the courtesy of the Cancer Society and Dr. Raymond D. Pruitt, of Mayo Clinic, Rochester, Minn., by courtesy of the Missouri Heart Association. A feature attraction will be a panel discussion "Backache in Women" by Joseph Hardy, M.D., of St. Louis, and Daniel Yancey, M.D., of Springfield. The banquet speaker is to be Mr. John Thornberry, well known Kansas City WHB-TV newscaster and commentator.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℞: Common Sense

Ointment Vehicles

Jesse D. Rising, M.D.

If you think that the vehicle of a medication is "the indifferent substance used to dilute the active ingredients," the chances are that you have not thought much about the importance of vehicles in local medication. Topical applications differ from medicines used for systemic effect in at least two important aspects: In the first place, one is not much concerned with the actual quantity of a drug in the medication but rather in the concentration of the medicament. In the second place, these supposedly inert materials which we call "vehicles" have physical properties which often alter the effects of the drugs which they carry, and which are of some therapeutic importance in their own right.

In recent years ointments have fallen into considerable disrepute and, for a good reason. At one time almost all dermal medications were administered in ointment form. In many instances they were contraindicated and, in the natural course of events, undesirable reaction followed. This led to a general reaction against ointments, and for some time medical literature was filled with articles condemning the indiscriminate use of ointments, or often merely condemning the use of ointments. Following this came a period, extending to the present time, in which ordinary ointments were abominated as a plague, but their place was taken by a legion of fancy proprietary vehicles which were stated to be "water soluble," "water-miscible," or sometimes just "washable."

Let us examine some of the facts about ointments and ointment vehicles. To begin with, ointments are more or less solid, oily materials which have an emolient or softening effect when applied to the skin. They are somewhat occlusive because they do not permit the free drainage or evaporation of discharges and perspiration. For this reason they may be excessively heating when applied to an acutely inflamed surface, or they may lead to the retention and spread along the skin of exudates containing virulent organisms. Finally, because the skin is lipophilic, they adhere well to the skin and even penetrate into it. Drugs incorporated into such lipophilic vehicles are held in much closer contact with the skin than if they are put in hydrophilic vehicles, and they tend to penetrate the skin more deeply. A drug incorporated in an ointment in a given concentration has a more profound effect than the same concentration of the drug applied as a dressing, powder or lotion.

It is important not to be misled by claims of superiority of this or that ointment vehicle, because quite often the claims are merely claims, and the superiority is only fancy. Various ointment vehicles do have differences which may or may not be of importance, but it is the physician's duty to understand the composition of the vehicle before he uses it. For one thing, always remember that if an ointment is indicated, it is indicated for specific reasons, and these same reasons dictate the use of a greasy, somewhat occlusive material. On the other hand, if an ointment is contraindicated it is unlikely that any of the fancy and expensive vehicles will circumvent the contraindications to the use of an ointment. Some of the more common ointment vehicles which are available in prescription pharmacies are listed below, and the approximate cost, to the druggist, for one pound is given.

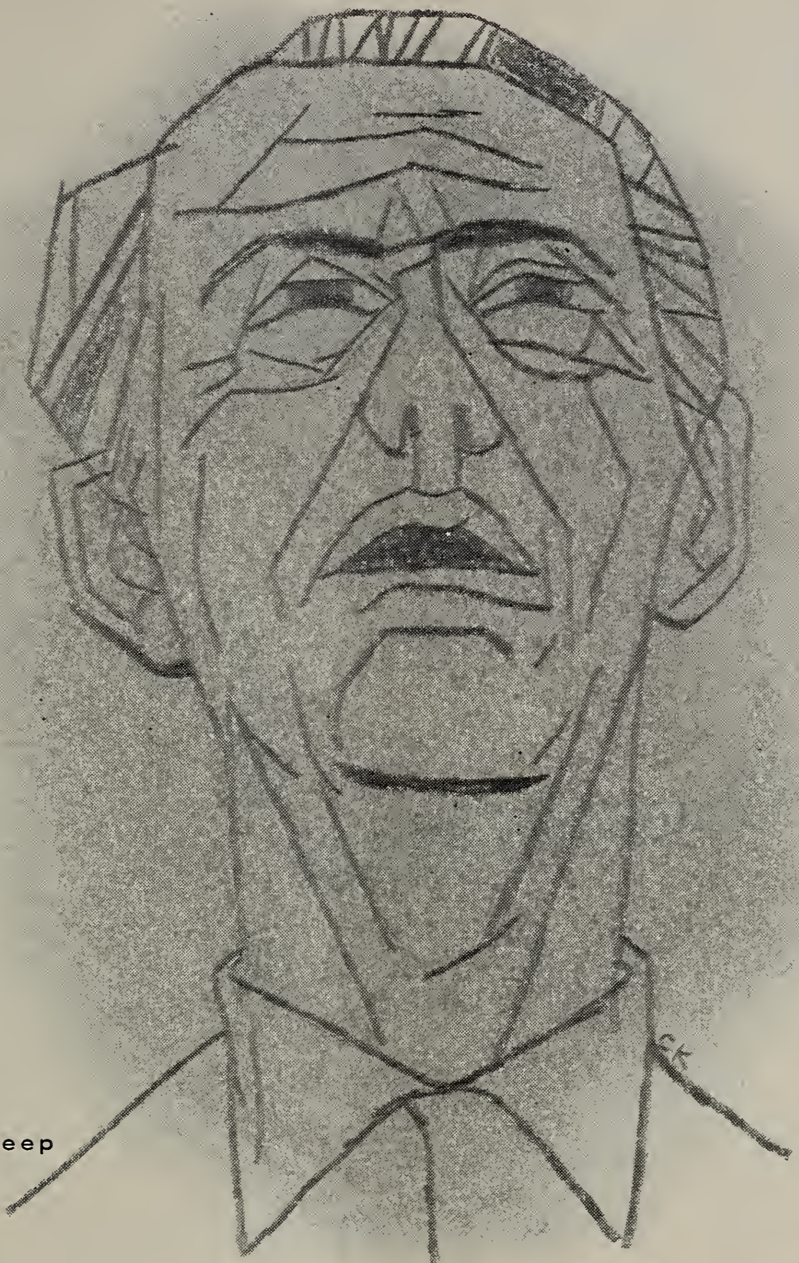
1. Carbowax 1500 (Polyethylene Glycol)	$1.50
2. Aquaphor	1.25
3. Lilly's Benzoinated Ointment Base	1.50
4. Hydrosorb	1.25
5. Squibb's Plasticized Ointment Base	1.50
6. Almay Emulsion Base	3.00
7. Neobase	2.50
8. "Universal Ointment Vehicle" (see text)	.50

Few ointment vehicles are truly "greaseless" as is so often claimed. Carbowax is an exception, it being chemically related to glycerine. Vehicles of this type are not truly oleaginous, and their properties differ somewhat from those of ointments. The usual "greaseless" ointment base is washable or water-miscible, rather than greaseless, and is usually either a water-in-oil emulsion or an oil-in-water emulsion. Such emulsions are essentially cold creams and the U.S.P. contains a fine cream of this type, Rose Water Ointment (Unguentum Aquae Rosae). Cold creams tend to break down fairly easily, so their pharmaceutical properties are not entirely satisfactory from that point of view. Another group of ointment vehicles, of which the Almay emulsion base is an example, are the vanishing creams. These are essentially modified soaps.

Whether an ointment vehicle is a straight oil, an emulsion or a vanishing cream, it retains the properties of ointments as described. The ones containing water differ only in that the water, so long as it lasts, will evaporate and be somewhat cooling.

The essential nature of ointments can be somewhat altered by the addition of 25 to 50 per cent of an insoluble powder, such as zinc oxide. The insoluble powder renders the ointment discontinuous, and therefore less occlusive and less heating. It also has some protective properties in its own right.

The physician who desires to write an extemporaneous prescription for an ointment, but who is dissuaded by the confusing multiplicity of vehicles available and by all the claims and counter-claims, can simplify his approach by adopting an extremely versatile and inexpensive vehicle which I choose to call "The Universal Ointment Vehicle." It consists of one part of anhydrous wool fat (Adeps Lanae, U.S.P.) combined with two parts of petrolatum (Petrolatum, U.S.P.). This combination will carry almost any medicament in our armementarium, including such common drugs as camphor, menthol, phenol, sulphur, benzoic acid, salicylic acid and tar preparations. It will even take aqueous solutions of drugs, and can indeed be made into an emulsion by the addition of large amounts of water. I have determined by trial that this vehicle will accept twice its volume in water, in which case it becomes a cold cream. There are many expensive vehicles on the market which approach this "Universal Ointment Vehicle" in many respects, but I have been unable to find one which equals it, even at four times the cost.



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Sound reasons why—after 24 years' use—more barbiturate prescriptions call for NEMBUTAL. How many of short-acting NEMBUTAL's 44 uses have you prescribed? Abbott

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If one desires to prescribe one ounce of an ointment, he can do so in the following manner:

℞
Wool Fat (anhydrous) ..10.
Petrolatum q.s.ad. ....30.

Thus one has the basic vehicle upon which infinite variations can be built by simply listing the drugs desired and their amount above the ingredient as written.

If a paste is indicated the vehicular portion of the prescription may be written as follows:

℞
Zinc Oxide ....10.
Anhydrous Wool Fat .....10.
Petrolatum q.s.ad. ....30.

Various drugs may be added to the basic paste, as for example 2 per cent of salicylic acid or perhaps 5 per cent of coal tar. Thus, variations may be made on this theme almost into infinity, and at extremely low cost.

In summary: Ointments are indicated, as a general rule, in the treatment of chronic, deep-seated, indurative lesions. For such conditions they have no peer, and their superiority is inherent in their greasy nature. On the other hand, ointments are contraindicated in the treatment of acute, inflamed, hot, weeping or vesicular lesions. Borderline conditions may be treated by the application of paste or cream lotions, but aqueous applications are usually used for the more acute conditions.

Who Signs the Cause of Death Statement?

James R. Amos, M.D., *Director, The Division of Health of Missouri*

It is important that the statutes pertaining to certification of deaths be strictly followed. Users of death certificates such as insurance companies, courts and such may reject them if signature is illegal.

The State Attorney General's Office in 1949 gave the following rules for certification of death certificates:

(1) "If the deceased dies with a physician in attendance, that physician should sign the death certificate.

(2) "In the event of a stillbirth, the physician, midwife or other person in attendance at the stillbirth, should certify the stillbirth and furnish such medical data as is available.

(3) "If the death occurs without medical attendance, the local registrar should inform the local health officer and refer the case to him for investigation and certification of the cause of death.

(4) "When the local health officer is not a physician or when there is no such officer, the local registrar himself shall complete the certificate.

(5) "If the circumstances suggest that the death or stillbirth was caused by other than natural causes, the local registrar shall refer the case to the coroner for investigation and certification.

"However, it should be noted that in cases arising under (3), (4) and (5) above, the signing of the death certificate should be done by those named officers only in the absence of a physician last in attendance (or in the event that such physician fails to sign the death certificate)."

It should be emphasized that Rule No. 1 includes the "coroner's" case also.

The Attorney General's rules are based on both the law and a Missouri Supreme Court decision.

It is readily observed from the preceding that most death records must be signed by the private physician. A few are signed by health officers or local registrars. Under the present statutes the coroner will sign very few.

It may be that the statutes need changing so that the coroner will legally certify certain deaths. It would seem that those legally to be certified by the local registrar at the present time should be certified by the coroner.

From the Bureau of Vital Statistics

S.M.A. St. Louis Meeting

As summer has ended and school begun, arrangements for the forty-eighth annual meeting of the Southern Medical Association are about complete. The Association has met in St. Louis four times previously, 1935, 1941, 1944 and 1950. The meeting begins with a general public session on Monday forenoon, November 8. Between that time and Thursday noon, November 11, forty-eight half-day sessions will be held. During Southern Medical meetings, physicians may best associate with men whose practice is like their own, and with men in each of the other divisions or limitations of clinical work. The viewpoint may be broadened in any direction which one chooses. This geographical division of medicine, the Southern Medical, is large enough to attract learned men for complete coverage of the year's progress, and yet so small or so subdivided, as not to bore the personal friendliness and appreciation of individual effort which are more necessary in medical education than any textbook or physical facility.

St. Louis in 1954 has many claims to fame. There are its two great medical schools, known because of the faculties which make them.

The well-known and popular president of the Southern Medical Association, Dr. Alphonse McMahon, heads the meeting in his own home town. Dr. R. O. Muether, president of the St. Louis Medical Society, has appointed Dr. Daniel L. Sexton as general chairman of the Committee on Arrangements. The local committees are active and capable and have been enthusiastic in their preparation for a welcome to the meeting.

St. Louis itself is a huge city with more than its quota of handsome office buildings, public buildings and residential areas. Its beautiful Kiel Municipal

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Reprint of Editorial, *Southern Medical Journal*, Journal of the Southern Medical Association, Birmingham, Alabama, Volume 47, Number 9, September 1954, page 903.

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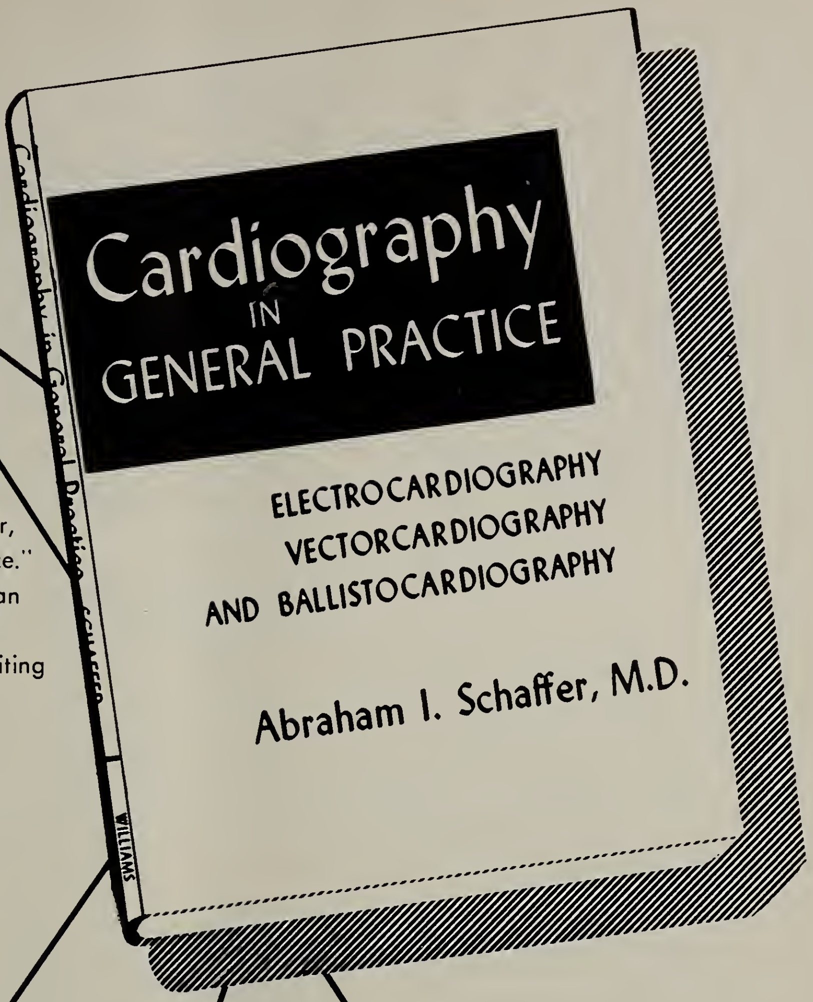
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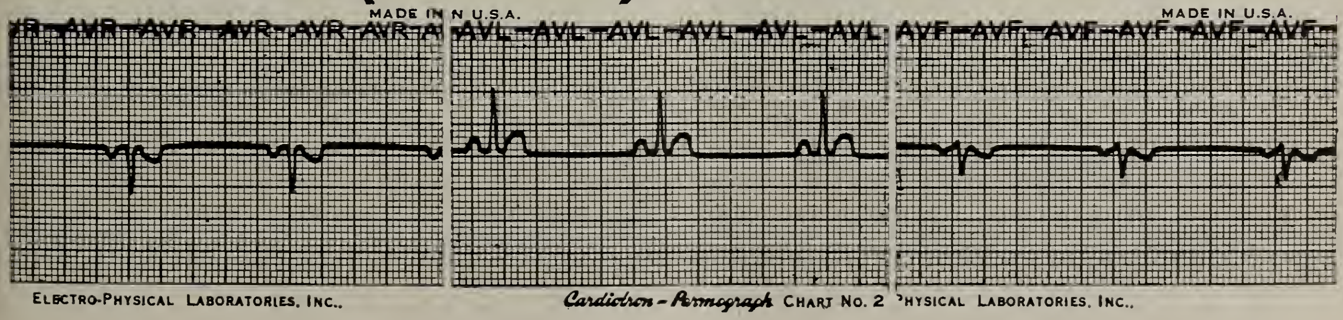

ELECTRO-PHYSICAL LABORATORIES, INC.. *Cardiotron - Permograph* CHART NO. 2 PHYSICAL LABORATORIES, INC..

Auditorium, headquarters for the meeting, is known of old to the Association. The St. Louis Medical Society itself owns a handsome building whose auditorium seats 700 persons; its library has more than 30,000 volumes and 335 periodicals. By St. Louis' art museum, its botanical gardens, its symphony orchestra and many other cultural features, it is known far beyond the Southern area.

The city has many claims to fame in medicine besides the modern discovery of the estrogenic hormone, and of the first radiopaque material for examination of the gallbladder. St. Louis was the home of William Beaumont, early student of digestive function, and discoverer of hydrochloric acid in the human stomach. The Missouri State Medical Association is one of the oldest in America. Its organization meeting was held in the First Presbyterian Church in St. Louis in November, 1850. The centennial was celebrated four years ago, when many interesting reproductions were published in Missouri papers of early operating room scenes and medical activities.

At the first state meeting, in 1850, steps were taken to secure the passage in the legislature of a sound medical practice act. It included establishment of a uniform system of registration of births, marriages, and deaths; control and inspection of drugs, and improvement of medical education.

These one hundred and four years of organization and of conscious pulling together provide a fine background for further education and entertainment of a great meeting in November.

Hotel accommodations in St. Louis are of the best. Requests for room reservations for the meeting should be sent to the Housing Bureau, Southern Medical Association, 911 Locust Street, Room 406, St. Louis 1, Missouri.

Book Reviews

Mayo Clinic Diet Manual. Second Edition. By The Committee on Dietetics of the Mayo Clinic. W. B. Saunders Company, Philadelphia. 1954. Price $5.50.

This 247 spiral book includes a multitude of diets for almost every medical or surgical condition, as well as for the normal individual and those who are obese or underweight.

The Committee on Dietetics of the Mayo Clinic have gathered together in one book the latest findings of the science of nutrition and have incorporated the various dietary requirements in sample diets that the average patient will find easy to follow.

It includes standard hospital diets; standard tube feedings; postoperative diets for different surgical procedures, as peptic ulcers, surgery on the stomach, small intestine and colon, and pelvic operations; diets for liver and gallbladder diseases, for colitis, sprue, allergy, urinary calculi, diabetes, cardiovascular-renal diseases, gout, iron deficiency anemia, obesity, pregnancy, underweight, epilepsy, low fat, low calcium, high potassium and high purine diets, as well as those for infants and children.

The appendix contains various tables, ideal weight charts, nutritional and caloric values of foods, and other data on the recommended daily dietary allowances. The index is quite complete.

This book contains information that will be useful to almost every physician. J. L.

Diseases of Women, by Robert James Crossen, A.B., M.D., Assistant Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine; Section Head of Unit I Obstetrics and Gynecology, St. Louis City Hospital; Assistant Gynecologist and Obstetrician to Barnes Hospital and St. Louis Maternity Hospital; Assistant Gynecologist to St. Louis Children's Hospital; Gynecologist and Obstetrician to St. Luke's Hospital. Tenth Edition with 990 Illustrations including 41 in color. C. V. Mosby Company, St. Louis, Mo. Price $18.50.

Nine years after the ninth edition, Robert James Crossen, its coauthor, has brought out a new edition dedicating it to his father, the senior author, and since 1907 author of this well-known text. This edition is a better book. It has added new information on the origin of ovarian tumors, embryology of the ovary and the interaction of the various hormones. The inclusion of psychosomatics is a welcome addition, indicating better understanding of functional disease in the female and at the same time the limits and gaps in these concepts. Willard Allen contributed a valuable ten pages on ovarian endocrine relations. The excellent but short (ten pages) section on Radiation Therapy is nicely done by A. N. Arneson.

To limit the size of the book chapters were deleted in this edition. This has not hurt the value of the book. The references are better arranged and are nicely indicated.

It seems, however, that the book so closely follows its old pattern that the emphasis of the book now becomes slightly distorted. However, it is remarkably broad in scope, with the material logically arranged. The book is written for student and practitioner. It is a little long for the student and might well include more of the practical details of gynecologic practice for the practitioner.

It is well illustrated and printed on high-grade paper. This text has been for many years outstanding in its field. With its improvements it is now even better, and is recommended to all interested in the subject. S. A. M.

Salt and the Heart, by Edward T. Yorke, M.D., Attending Cardiologist, Alexian Brothers Hospital; Associate Cardiologist, St. Elizabeth Hospital; Dispensary Physician, Elizabeth General Hospital, Elizabeth, N. J.; Consultant in Medicine, Rahway Hospital, Rahway, N. J. Drapkin Books, Linden, N. J. 1953. Price $3.45.

This small volume deals with the role of salt in cardiovascular disease. One chapter is devoted to a discussion of digitalis. The author discusses the role of salt in hypertension and in the failing heart. This book is written for the laity. The last few chapters give an analysis of the salt content of the various foods and should be of value to those planning the low sodium diet. R. V. P.

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BERNARD NURSING HOME accepts patients who are chronically ill, aged or invalided, and convalescents, whose primary need is good nursing care. Our staff is open to all accredited physicians. Facilities are available for low voltage muscular and nerve stimulation in paralytics, chronic arthritics, etc. Our home is beautifully furnished, centrally located, equipped with automatic sprinkler system, and is adequately staffed. Address 4385 Maryland, St. Louis 8, Mo., Telephone Jefferson 5-9290.

FOR SALE: One Hundred M. A. Profexray Diagnostic X-Ray Unit complete with rotating anode tube head and five M. A. under table fluoroscopy unit. Used two years and with new machine guarantee against overload and mechanical defect for one year. Total cost new, $4994.80. For sale FOB Cape Girardeau $3500, installation cost $75. John T. Crowe, M.D., 222 N. Middle St., Cape Girardeau.

Special Notice—Because of ill health I am closing my office. Office equipment including x-ray and microtherm for sale at a sacrifice. This town is a marvelous opportunity for a doctor who wishes to begin making money from the first day he opens an office. Address, W. J. Rutledge, M.D., Campbell, Mo.

FOR SALE: Physician's six-room two-story brick residence with three-room adjoining office, two baths, two car brick garage, permanent type tile roof. Well established medical practice, ideal location accessible by public transportation. Excellent investment. For appointment call FR 1-0983 or write Mrs. R. E. Byrns, 3804 N. Grand Blvd., St. Louis.

WANTED—Locum tenens October 15 to December 15, 1954. Completing a two year tour of duty in the Air Force. Starting residency in January, 1955. Graduate, 1949, Washington University School of Medicine. Completed rotating internship, plus one year surgical residency, plus one year general practice, plus four months orthopedic training before entering service. Licensed to practice in Missouri. Married, with two small sons. Wife has degree in nursing. Home is at Elsberry, Mo. Present address: Capt. W. J. Cannon, M.D., 3650 U.S.A.F. Hospital, Box 680, Sampson AFB., Geneva, New York.

ANESTHESIOLOGY residency program is now available at the St. Louis City Hospital. Applicants are invited to address inquiries to the Medical Director, 1515 Lafayette Ave.

OFFICE SPACE AVAILABLE—Air-conditioned office space in University Club Building completely equipped for practice of internal medicine. Available to young internist at very low rate. Contact Box 194, Missouri State Medical Association.

WANTED: A good young M.D. to take the place of an elderly physician in a good town of 2,000. R. C. Schooley, M.D., Odessa, Mo.

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Curiosa et Trivia

William B. McCunniff, M.D.

Richard Bright, for whom the disease is named, died at the age of sixty-nine, of Bright's disease. At the death of this most sought-after consultant in London, it was said that ". . . there were few who recorded so much . . . reasoned so extensively . . . and subsequently had so little to retract . . ." Strangely, after a medical life of wards and post-mortem rooms, he stipulated that no autopsy be done on himself.

Talented scientist whose fame rests chiefly on the invention of the telephone, but who was a teacher of music and elocution for several years, Alexander Graham Bell received his M.D. from the University College and London University.

Perhaps they're not such therapeutic orphans, the "miracle drugs" notwithstanding—total production of sulfonamides in 1941, 2,091,000 pounds; in 1951, 6,411,000 pounds.

The first hospital under the auspices of the Christian Church was established at Seasaria, near Antioch, by St. Basil about the year 400. At this hospital, where the first nursing order, Our Lady of Mt. Carmel, originated, ". . . disease was investigated and sympathy proved . . ."

Prototype of the modern tommy-gun, the Gatling Gun, was the invention of New York College of Physicians and Surgeons graduate, Richard J. Gatling, M.D.

Signs of our times: current death rates from accidental poisoning are essentially unchanged in recent years. Arsenic, lye, and mercury poisonings are down significantly, but barbiturate poisoning has increased to the point where it represents about 30% of all deaths. Alcohol ranks second in frequency (about 20%) but most alcohol deaths are due to wood and denatured alcohols.

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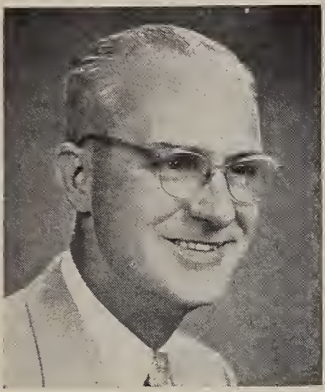
Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

Guest Editorial

Ozarks Area Stewardship

Durward G. Hall, M.D., *Springfield, President, Greene County Medical Society*



Sufficient reasons for pride in the Missouri State Medical Association are readily afforded by reading the minutes of the 96th Annual Session, so ably illustrated in the July issue of Missouri Medicine. We in Greene County are proud to be a component part of that which is the Missouri State Medical Association: the active and forceful uniting of the individual county medical societies into one organization, dedicated to the cause of protecting and improving the health of the citizens of Missouri.

Organized medicine is entirely dependent upon the basic unit, the county medical society and our stewardship has to be judged solely by the degree to which we prepare our membership to meet and fulfill the medical needs of those we serve.

Greene County Medicine has something to show of which it is proud; and which perhaps, in our respective work-a-day lives, those outside of the Society are not so acutely aware. Springfield is rapidly becoming a medical center. It is homebase for the only local Chapter of the College of Surgeons in Missouri, has two of the largest nonprofit hospitals to be constructed under the Hill-Burton Act, to say nothing of fine private hospitals and clinics. There are three nurses' training schools and, as you know, an active and consolidated medical organization embracing more than 130 active physicians.

The first attribute upon which this Society looks with pride, and which accounts for the rapid growth of organized medicine in Greene County (and the area as a medical center), is the spirit of cooperation and united front universally presented by this Society. This must be apparent to those interested in the State organization, and is studiously supported by the Society itself.

The phenomenal growth of Springfield as a medical center, which even aspires to approved internships and residences as well as participation in the externships of students in the advanced years of the University of Missouri, can be attributed secondly to the Open-Door Policy of its medical society and incumbent physicians toward newcomers. This, along with the rapidly expanding town, the huge drawing area extending from St. Louis to Tulsa in one direction, and Kansas City to Memphis in another, to say nothing of climate, beautiful scenic hills and good fishing has led to an unusually high percentage of excellently trained, specialized and well-qualified new doctors. Many who served at O'Reilly General Hospital during and after World War II have remained. Only two young physicians have left in six years. The complexion of the Society changes rapidly these years, and everyone is eager to help the new, young, eager and well-trained physician.

The unity of purpose of the members of the Greene County Medical Society is evidenced by the fact that we, though one of the smaller societies in the country, have, for years, had our own executive offices and paid lay secretary. Our hospitality extends beyond "Greene County Rooms" at the time of our Association meeting. As President of the Greene County Medical Society I urge you to visit us in Springfield, the medical center of the Ozarks.

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

One of my infertility patients met my wife at a social function. In the course of discussing my patient's most favorite topic, "her personal health," she asked my wife, "Do you think your husband will be able to get me pregnant?"

My quick-witted spouse rose to the occasion. "I guess so," she said, "he did me!."

The animal which possesses the greatest attachment for man is woman.

I was attempting to explain the symptoms to a patient in the simplest terms.

"Oh, Doctor," she interrupted brightly, "You can be as technical as you like. I've just finished a first aid course."

One of our nurses wants to know if extrauterine pregnancy means twins.

(Continued on page 874)

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Missouri Academy of General Practice

William J. Shaw, M.D.

Due to his strategic location at the grass roots, every general practitioner in Missouri should be cognizant of the facts regarding the present feud which apparently exists between the American Medical Association and the veterans groups with "Vitriolic Insinuations" throwing challenges at "Anti-Veteran Crusades" in the headlines of the daily papers and at national conventions.

The VA reports that as of June 30, 1954, "The total number of veterans in civil life was 20,850,000 with an annual increase of approximately one million. The total daily patient load at that time in VA and non VA hospitals was 109,640, of which number 4,790 patients were in non-VA hospitals. The total number of site acquisitions for new hospitals, as of June 30, 1954, was 66, and the total number of new hospitals completed was 60, while six new hospitals were still under construction. In the hospital addition and conversion program, 52 additions and conversions had been completed, four were in progress, and two other construction contracts had been awarded." (J.A.M.A., Sept. 4, 1954.)

A critical study of this report reveals the answers. A projection of these statistics into the foreseeable future will explain why the doctors of this country have gone on record as in favor of, (1) the best possible medical and hospital care for veterans with diseases and disabilities which are service incurred or aggravated, (2) the same care, temporarily, to veterans suffering with tuberculosis or neuro-psychiatric disorders of non-service connected origin who are unable to pay the expense of necessary hospitalization. It is conscientiously believed that free treatment for veterans with nonservice connected disabilities cannot be continued indefinitely in view of the detrimental effect on the health and economy of the entire nation.

The general practitioner in Missouri, due to his close contact with other organizations, can do a yeoman service in discussing with veteran and other organizations the actual issues involved in this controversy and the basic unanimity that actually exists between the rank and file of veteran and medical organizations.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

Every time I see an ambulance high-balling it down the road with red lights flashing and siren screaming it arouses my curiosity as to the purpose of the trip—who's in it—what's happened, or happening, that makes for all the rush.

I have learned from experience that the times are few and far between when my driving 80 or 50 on a so called emergency call really makes any difference in the outcome of the case. The natural conclusion is why should I risk my neck on the highway when I know full well that speed causes a great percentage of the accidents.

Granted that we hear of few ambulances being involved in accidents, we don't know how many they may cause, indirectly, by their disregard of traffic rules. I have read recently where several large cities have prohibited sirens and speeding by ambulances because of the traffic situation.

Then, too, I think most ambulance drivers could use a little instructions, or in lieu of that a little common sense in handling accident victims. Not long ago I was coming back from Kansas City one night and happened to be among the first along after six kids were scattered over a pasture when their convertible missed a curve. I got out my grip and was helping the more serious when the ambulance skidded in to a landing. To watch a kid with a dislocated hip being loaded sort of made my stomach crunch. Another was practically out, spitting blood and choking. I was holding his tongue down with a blade when I was ordered to "get those damn sticks out of his mouth." I closed my grip—and for once my mouth, and drove on home . . . a good bit slower!

Maybe it's a local responsibility or maybe it ain't . . . a little common sense from all concerned just might save someone a lot of misery.

Your slowed down nephew,

Pete

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Missouri Medicine in Review

Leo H. Pollock, M.D.

NOVEMBER, 1914

Professor Ludwig Pick, Professor of Pathology, U. of Berlin, spent three days in St. Louis last week.

The American Roentgen Ray Society met in Cleveland, September 9 to 12. Dessauer, of Frankfort, discussed artificial production of gamma rays; Coolidge (of Coolidge tube fame), Shearer and Duanne also read papers.

Proposal to merge Surgeon-General's Library with Congressional Library is opposed by the St. Louis Medical Society.

At the Atlantic City Session of the A.M.A., retiring president Dr. Witherspoon presented a gold medal to William Crawford Gorgas, Surgeon-General, whose genius made possible the Isthmian Canal.

NOVEMBER, 1929

A disease formerly confined to the Mediterranean countries and to the Island of Malta has appeared in Continental Europe and in the U. S. Undulant fever (Malta fever) has been found in almost every state, midwestern states showing the greatest incidence.

The etiologic factor (Brucella melitensis), was formerly thought to be harbored only by infected goats. The same organisms (probably slightly modified strain) are found in cattle and hogs and cause contagious abortion. Dr. Alice Evans, Hygienic Laboratory at Washington, D. C., discovered these facts, and contracted the disease while working in the laboratory.

Washington U. School of Medicine, which has done much to make St. Louis an international medical center, announced that, beginning in 1931, four years of college preparation are required of every applicant. The medical school will be the first of W.U.'s to be placed on a graduate basis, the objective announced by Chancellor Throop when he took office last winter.

Dr. A. W. Westrup, Webster Groves, President of the St. Louis County Medical Society, has been appointed as superintendent of the new St. Louis County Hospital, with construction to begin this month.

NOVEMBER, 1944

Capt. Alphonse McMahon, St. Louis, now serving with the Navy, received the Mississippi Valley Medical Society 1944 Distinguished Service Award at the annual meeting of the society in Peoria, September 28.

The work of Dr. M. G. Seelig, St. Louis, and others at the Barnard Free Skin and Cancer Hospital, in the substitution of potassium bitartrate for surgical talcum was editorialized in the September 23 issue of the J.A.M.A.

Missouri has been signally honored with two St. Louis men and a former St. Louis physician receiving Nobel Prizes. Dr. Joseph Erlanger, Director of the Physiology Department at W. U., and Dr. Herbert Spencer Gasser, former Professor of Pharmacology at W. U., now Director of Rockefeller Institute in New York, were recipients of the 1944 award. Dr. Edward A. Doisy, Professor of Biochemistry at St. Louis U., shared the 1943 award, made after a year's delay, with Dr. Henrik Dam, Copenhagen scientist now at Rochester, New York. Drs. Erlanger and Gasser worked on the function of the individual nerves, in the field of electrophysiology of nerves. Drs. Doisy and Dam were honored for their fundamental investigation of vitamin K. Vitamin K was discovered and named in 1935 by Dr. Dam.

Pettis County Pot Pourri

(Continued from page 870)

After treating an old man for a kidney condition, I received this note from his wife:

"Please send me some more pills for Joe. Before he started taking that medicine, his water was the color of coffee. Since taking the pills it has returned to the national colors."

They tell the story hereabouts, about long since deceased editor of long since defunct paper, the *Sedalia Bazoo*. It seems that through the years he had complained loud and assiduously about the fees charged by his doctor and his lawyer.

As he lay on his death bed, he hurriedly summoned his doctor and lawyer to his bedside. When they arrived he asked that one stand on each side of his bed, and then settled back contentedly.

Curious, they asked what was the idea.

With a gleam of satisfaction in his eye he replied. "I want to die like Christ, between two thieves."

My 6 year old asked me if I was going to give her any of that "glamour globulin" she heard about.

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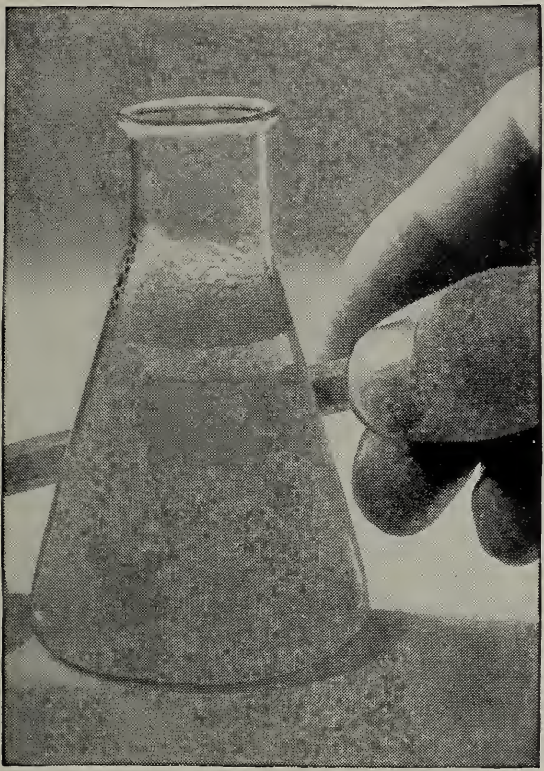

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1. *American Medical Association: New and Nonofficial Remedies, 1954. J. B. Lippincott Co., Philadelphia, p. 147*
2. *Scott, R. L., and others: Antibiot. & Chemo. 4:691 (June) 1954*

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With Our Auxiliary

MRS. W. E. MARTIN, *President*

November is the month in which we wives look forward to attending Southern Medical Association with our doctor husbands, and anticipate the A.M.A. Clinical Session (this year Nov. 29 to Dec. 2 in Miami, Florida). We, in Missouri, will be host and hostess to the Southern Medical, Nov. 8-11 in St. Louis. You M.D.s know that the scientific sessions of Southern are the best, and we women enjoy the friendliness and good fellowship along with southern hospitality at its social affairs. The most gracious and charming Mrs. George D. Feldner is President of the Auxiliary.

St. Louis is doing much to make this meeting a success and honor their own Dr. Alphonse McMahon, Southern Medical president.

November is also a time for us to pause and be thankful that we live in a peaceful America, not torn by war. Let us pray that America will remain peaceful, remembering that a trained, alert America is a mighty force for peace. Medical men are realizing more than the public the necessity for an informed public, which knows exactly what their duties are in case of disaster. Is your city, town and county organized in Civil Defense? Are there trained First Aid workers, mobile units and lists of volunteer workers and supplies available for any emergency in your community? As individuals, we should urge legislative support for Civil Defense; sign the volunteer registration card; be fingerprinted; and urge P.T.A.s to place in schools identification tags for all children. Homes should be prepared for any emergency.

The Auxiliary is fortunate to have Mrs. Delon A. Williams, Kansas City, as our chairman of Civil Defense and represent us on the Missouri State Civil Defense Advisory Committee. She urges us to accept the challenge and the call of "Forward March" in survey and action. Survey to determine where the need is imperative; action is imperative in two fields, educational and participating. Remember always that "The Armed Forces plus Civil Defense equal National Survival and Peace.

Capsule Clinics

IRVING A. WIEN, M.D.

- The two most striking endocrine changes which follow physiological cessation of ovarian function are decreased excretion of estrogens and increased output of gonadotrophic substances. Riley, G. M.: Essentials of Gynecologic Endocrinology, Caduceus Press, Ann Arbor, Michigan, 1952.

- Equine gonadotrophin is used as the follicle-stimulating agent of the ovary and chorionic gonadotrophin from human pregnancy urine is employed as a luteinizing agent. Riley, G. M.: Essentials of Gynecologic Endocrinology, Caduceus Press, Ann Arbor, Michigan, 1952.

- In the surgical patient, the vital work of the kidneys may be made more difficult by such factors as the development of hypotension or circulatory collapse, by the effect of anesthetic agents or other drugs on the kidneys, by periods of impaired nutrition and fluid and electrolyte changes brought about by the patient's inability to take food orally, or by nausea and vomiting. Clark, J. K., and Barker, E. S.: Advances in Medicine and Surgery, Graduate School of Medicine, University of Pennsylvania, W. B. Saunders Co., Philadelphia, 1952.

- In nearly two thirds of 140 cases of gastric ulcer reported by Smithies from the Mayo clinic either chronic appendicitis or cholecystitis was demonstrated as a concomitant process. Stevens, A. A.: Practice of Medicine, W. B. Saunders Co., Philadelphia, 1928.

- What few hazards attend the taking of tissue for biopsy are far outweighed by the advantages to the patient and the surgeon to be gained thereby. Treatment should almost never be given for cancer (exception is malignant melanoma) until its existence has been proved microscopically. Nelson, P. A., et al.: Surg. Clin. North America **32** (February) 1952.

- In a normally functioning venous system, venous pressures are increased ten times in the upright position compared to the horizontal position. Campbell, D. A.: Missouri Medicine, **50** (September) 1953.

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SCHERING

News From the Medical Schools

WASHINGTON UNIVERSITY NEWS

HONORED: Dr. Robert Elman, Professor of Clinical Surgery, recently was honored at a testimonial dinner during the National Medical Association convention, Washington, D. C., for his work in training Negroes in medicine. He presented the annual Douglas Stubbs Memorial Lecture, being the first white physician to deliver the lecture. Dr. Elman has been chief of staff and director of surgery at Homer G. Phillips Hospital, the largest Negro hospital in the world, for nearly sixteen years.

WE TRAVEL, SPEAK: Papers by Dr. Henry A. Schroeder, Associate Professor of Medicine, and Dr. H. Mitchell Perry, Instructor in Medicine, were read at the Second World Congress of Cardiology, September 12-17, in Washington, D. C. Dr. Schroeder reported on "Medical Management of Hypertension," and Dr. Perry presented "Pharmacology of Hydralzine." Dr. Joseph C. Edwards, Instructor in Clinical Medicine, exhibited on the management of the hypertensive patient and lectured on "Drug Therapy of Essential Hypertension."

Dr. Bernard Becker, Professor of Ophthalmology, presented two papers at the 17th International Congress of Ophthalmology, Sept. 12-17, in New York: "The Use of Diamox in the Treatment of Glaucoma," and "The Evaluation of Glaucoma Therapy by Tonography." At the American Academy of Ophthalmology and Otolaryngology, following the Congress, Dr. Becker and Dr. T. E. Sanders, Associate Professor, presented a course entitled, "Circulatory Diseases as They Affect the Eye." Dr. B. Y. Alvis, Sr., Associate Professor Emeritus, presented a course entitled, "The End Results of Various Types of Cataract Wound Closures." Dr. Sanders also presented a paper entitled, "Infantile Glaucoma Second to Nevo-Xantho-Endothelioma."

Dr. James Barrett Brown and Dr. Robert Elam, both Professors of Clinical Surgery, presented papers at the Mississippi Valley Medical Society Meeting, September 22-24, in Chicago. Dr. Brown spoke on Plastic Surgery in Farm and Industrial Accidents," and Dr. Elman presented "Common Water and Electrolyte Problems."

Dr. Robert F. Furchgott, Associate Professor of Pharmacology, and Dr. Oliver W. Lowry, Professor of Pharmacology, participated in the fall meeting of the American Society for Pharmacology and Experimental Therapeutics, September 6-8, at the University of Virginia and Medical College of Virginia, Charlottesville. Dr. Furchgott's papers were on "Relaxation of Aortic Strips by Near Ultraviolet and Visible Radiation," and "Influence of Drugs on the Action Spectrum." Dr. Lowry participated in a panel discussion, and spoke on "Cytoarchitectural Analysis."

UNIVERSITY OF MISSOURI NEWS

FRESHMEN: Forty-five students were admitted to the U. of M. School of Medicine, beginning September 15; the total enrollment of medical students is now 93. The School of Nursing admitted 43 new students to its freshman class; the total enrollment is now 124.

NEW APPOINTEES: Dr. Eugene T. Standley from Columbia University as Assistant Professor of Pathology; Mrs. Mercedes Smith from Columbia, Mo., as Instructor in Nursing; Miss Betty Crim from Columbia, Mo., as Instructor in Nursing; Dr. John Walters from Columbia, Mo., as Clinical Associate in Medicine; Dr. A. McChesney Evans from Columbia, Mo., as Clinical Associate in Medicine; Mr. Loy Barnes as Assistant in Surgery; Mrs. Emily Guyer as Assistant in Medicine; and Miss Barbara Read as Assistant Instructor in Microbiology. *New Graduate Assistants:* Don H. Blount; William P. Dennis; Raymond F. Gray; Arnold Funckes; Helen R. Poss; Dennis R. Semkin; Charles G. Stephens; Cecil Watson and Robert S. White. Mr. Chester Colby, from the Boston Medical Society Library, is now Medical Librarian. Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, has been appointed to the Council on Nutrition and Metabolism of the A.M.A.

WE TRAVEL, TALK: Dr. William A. Sodeman, Professor and Chairman of the Department of Medicine, addressed the Texas Academy of General Practice, Galveston, Texas, on September 9, then attended the Second International Cardiology Conference, Washington, D. C., during the week of September 13. Dr. Robert L. Jackson, Professor and Chairman of the Department of Pediatrics, attended a study council meeting for the Section on Nutrition and Metabolism, National Institute of Health, Bethesda, Maryland, on September 16-17, and addressed the Annual Meeting of the Mississippi Valley Medical Society in Chicago, September 23. Dr. Clarence D. Davis, Professor and Chairman of the Department of Obstetrics and Gynecology, addressed the Jasper County Medical Society, Joplin, September 14. Dr. Roscoe L. Pullen, Professor of Medicine and Dean of the School of Medicine, addressed the Washington State Academy of General Practice, Seattle, Washington, August 6; the Lincoln-St. Charles County Medical Society, Wentzville, September 21; the Annual Meeting of the American Medical Writers Association, Chicago, September 24; and the St. Louis Academy of General Practice, September 28.

RESEARCH GRANTS: During the current academic year, grants totaled $49,663.81, distributed as follows: $25,000 from the National Heart Institute for instruction and research in heart disease, under the direction of Dr. William A. Sodeman; $6,000 from the U. S. Public Health Service to Dr. Lloyd E. Thomas, for studies on the "Localization of the Structural Lipoprotein of Cells"; $7,000 from the National Heart Institute to Dr. B. A. Westfall, Dr. D. K. Meyer, and Dr. W. S. Platner, for studies on the "Glycogen Factors of the Anoxic Heart"; $400 from the A.M.A. to Dr. Hugh E. Stephenson, Jr., for studies on the "Nature of Pulmonary and Cardiac Emboli"; $500 from the Committee on Research of the Council of Pharmacy and Chemistry, A.M.A., to Dr. Herbert S. Goldberg, for studies on "The Chemotherapy of Experimental Leptospirosis"; $250 from the Society of the Sigma Xi, to Dr. Herbert S. Goldberg, for studies on "Antibiotic Residue and the Emergence of Antibiotic Bacteria from Nontherapeutic Uses of Antibiotics"; $600 from

(Continued on page 880)

The Full-Liquid Diet pulls its own weight!

COTTAGE CHEESE
Grade "A"
JUICE
CARROT

Packing good nutrition into the full-liquid diet for your patient who must stay on it a long time is sometimes difficult. But with a blender or egg beater, almost any food can be used.

Mix the same foods many ways—

Strained chicken in milk makes "bisque"—in tomato juice it's "creole." Strained liver and bacon double-times the same way.

Your patient may like cottage cheese whipped into milk flavored with chocolate and mint, or he can blend it with cranberry juice sparked with lime.

Strained carrots go in milk, broth, or pineapple juice. Flavor the milk blend with nutmeg, the broth with parsley, and the juice with cinnamon and brown sugar. An egg or skim milk powder may be added for a protein bonus.

Strained fruits in fruit juices do well with a squeeze of lemon or a touch of mint.

Then serve them up with dash—

Bright colored drinks look good in clear glass—pale ones in gayly painted glasses. And if a mixture looks drab, hide it in a bean pot or a round jam jar wrapped in a napkin.

Add a bright plastic straw. And for garnish, try a sprinkle of spice, a spoonful of sherbet, a dab of whipped cream, or a lemon slice hooked on the edge of the glass. Or frost the rim by dipping the glass in water, then in sugar.

Of course, only you can tell your patient *just which foods* he can and must have for his specific condition. But these suggestions can help guide him within the limits you set.

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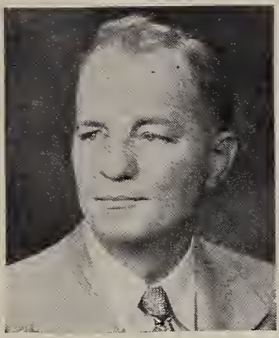
President's Comments



In this, our second special issue, we salute Springfield, its medical profession and institutions and the city itself.

For many years a friendly feud has been going on between the residents of Springfield and St. Joseph as to which is the larger or which is the better city of the two. Of course, any St. Joseph oldtimer, such as myself, would naturally take the side of St. Joseph in any discussion about the two cities and the census of 1950 does bear out our contention about population, at least, namely, St. Joseph 78,588; Springfield 72,109.

During the last several years I have served in various capacities with many of the Springfield doctors. They were always willing to help in matters involving their profession. My hat is off to them again for their efforts and enthusiasm in developing this special issue.

H. E. Peterson, M.D.

News From the Medical Schools

(Continued from page 878)

the Lederle Laboratories Division, American Cyanamid Company, for the Lederle Medical Student Research Fellowship, made to Mr. Earl L. Rapp, second-year medical student, pursuing research in the Department of Physiology and Pharmacology, under the direction of Drs. Westfall, Meyer and Platner; an unrestricted grant of $9,913.81 from the National Fund for Medical Education and the American Medical Education Foundation for the University of Missouri School of Medicine.

WE POSE IN PRINT: Dr. Thomas D. Luckey, newly appointed Professor and Chairman of the Department of Biochemistry, was featured in a recent issue of *Newsweek*, based on his article concerning a uniform diet for all animals published in *Science*, for September 3. The photograph of Dr. William A. Sodeman, Professor and Chairman of the Department of Medicine, appeared on the cover of *Modern Medicine* for September 1, 1954.

ST. LOUIS UNIVERSITY

NEW FACULTY: Twenty-five new faculty members were added to the teaching staff of Saint Louis University's School of Medicine September 1. They are: Dr. Archibald M. Ahern, assistant in internal medicine; Dr. George H. Ahlering, instructor in gynecology and obstetrics; Dr. Matthias H. Backer, Jr., instructor in gynecology and obstetrics; Dr. Pietro Bramante, instructor in physiology; Dr. Edward F. Burkhart, instructor in dermatology; Dr. Charles J. Cherre, assistant in radiology; Dr. Mina K. Edelman, assistant in radiology; Dr. Robert J. Fleming, instructor in ophthalmology; Dr. Ian D. Ferguson, assistant professor of physiology; Dr. George E. Gantner, assistant in pathology; Dr. Marvin H. Gibstine, assistant in pediatrics; Dr. Dalton L. Kinsella, Jr., assistant in internal medicine; Dr. Thomas F. Maher, assistant in radiology; Dr. John Francis McCann, assistant in internal medicine; Dr. Robert B. McCloskey, assistant in otolaryngology; Dr. Sherwood P. Peartree, assistant in radiology; Dr. Leonard Procita, instructor in pharmacology; Dr. M. Cecelia Reichert, assistant in internal medicine; Dr. Shale M. Rifkin, assistant in surgery; Dr. Salvatore N. Riggio, assistant in pediatrics; Dr. George E. Siemers, assistant in gynecology and obstetrics; Dr. David L. Simon, assistant in pediatrics; Dr. John B. Sutphin, assistant in pediatrics; Dr. Thomas L. Tombridge, assistant in pathology; and Dr. James C. Vest, instructor in surgery.

HONORED: Dr. Alphonse McMahon, associate professor of internal medicine, will be honored at a reception sponsored by the Medical Alumni during the Southern Medical Association's annual meeting to be held in Saint Louis November 8-11. The reception for Dr. McMahon, who is president of the S.M.A., will be held in the University's School of Commerce and Finance Lounge, 3674 Lindell Boulevard, November 9.

TRAVEL: Dr. Louis L. Tureen, assistant professor of clinical neurology and psychiatry, has accepted an appointment to spent 4½ months at the Neurological Institute, National Hospital, London, effective October 15. While abroad Dr. Tureen will tour neurological and psychiatric clinics in Holland, Germany, France and Italy.

Neither So Rare Nor So Hopeless

Tumors of the small intestine should not be regarded as surgical rarities. The cases reported have so increased that they no longer need to be enumerated . . . this lesion deserves routine consideration in the differential diagnosis of intestinal distress or bleeding. . . . Resection can be done in about 45 per cent of cases . . . surgical mortality is highest in the duodenum and lowest in the jejunum. . . . While cancer of the colon has 50 per cent five-year survivals, in the small intestine it is 12 per cent. . . .—Leo H. Pollock, M.D., Kansas City, *American Journal of Surgery*.

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Blind Accessory Ureter

M. WENDELL DIETZ, M.D.; JOSEPH G. SICELUFF, M.D., and LYLE D. LITTON, M.D., *Springfield*

Receipt of a roentgen or urologic consultation describing a urinary tract anomaly excites little other than routine interest by the average practitioner. With the advent of the urogram as a vital diagnostic tool, universally and habitually employed, he has accommodated to the extraordinary rate of occurrence and endless variability of these congenital deviations. In addition to a statistical consciousness of these abnormalities, the recorded experience of late years attests to both the surgical and medical significance of the anomalous organ. Infection, calculus formation and obstruction accompany urinary tract malformations in a decisive ratio.

To embrace the vast spectrum of ureteral anomalies, classifications have been devised as to caliber, form, lumen, origin, termination, number, position and others. Of these groupings, variation in the number of ureters is the anomaly most often identified. This presentation concerns an exceedingly rare complication of ureteral duplication: the blind accessory ureter. We have accumulated from three unrelated institutions a collection of three well defined examples of this developmental error. These comprise the largest single series of such cases discovered in the literature available to us. A description of these data is prefaced by general comments concerning the nature of this disease, several historical milestones in the clarification of the process and, finally, a consideration of another rare and somewhat related malformation: the blind single ureter with renal aplasia.

Any ureteral segment that is closed at one end and is associated with an ipsilateral ureter of functional capacity is a blind accessory ureter. In the majority of reported cases, the blind segment has been a limb of a bifid ureter. However, it may enter the bladder through an accessory ureteral orifice.

The blind end does not always occur distally; an accessory ureter from a double kidney has been described which ended blindly below. More rarely, a supernumerary ureter will terminate blindly at both the cranial and caudal ends. Another variant is the type in which three ureteral orifices are found on one side of the bladder with one of the three ureters ending blindly.

No conclusive explanation of the production of these congenital lesions has been proposed. Embryologically, the ureteral bud (the anlage of the collecting system of the kidney) must progress dorsally and impinge upon the metanephrogenic anlage of the secretory kidney portion to insure normal growth and maturation. The complexity of this intricate evolutionary process is enormous; successful completion would appear more improbable than faulty development.

Some writers have postulated a premature cleavage of a single ureteral bud or, perhaps, duplicated ureteral buds as the basis for the blind accessory ureter. Lack of a "proliferative stimulus" to cause the blind ureteral bud to follow the nephrogenic cells upward has been proposed. At operation or autopsy, blind accessory ureters have been found to end in relation to rudimentary histological elements; others have not been associated with renal tissue.

In 1933, Kretschmer presented an enlightening investigation of a museum preparation of an infant with multiple severe anomalies. Death had followed operation for tracheo-esophageal fistula. Accessory blind ureters existed bilaterally. Following a discriminating interpretation of these, Kretschmer emphasized the need for correct terminology inasmuch as previously similar cases had been erroneously termed "diverticulum of the ureter."

A fundamental contribution to the study of ureteral outpouchings in general appeared in 1947. Culp collected fifty-two cases of what had been reported unequivocally as ureteral diverticula. Of these, fourteen proved upon critical analysis to be blind-ending branches of bifid ureters. Culp reaffirmed Kretschmer's plea for precise classification and proposed criteria for differentiation of these entities. He "elected to place in the group of blind-ending branches of bifid ureters any blind-ending hollow structure whose lumen joins that of the ureter at a distinct angle, whose wall presents the same histological coats as the ureter and whose length is more than twice its greatest diameter." He maintained that while congenital diverticula are evidently the result of an embryologic error similar to that of blind-ending bifid ureters, the diverticula becomes "greatly dilated sacs instead of incomplete ureters."

Clinically, intermittent hematuria was the major symptom in two cases of blind accessory ureter described by Sisk & Kundert in 1937. Operation was

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From the Departments of Radiology and Urology, Burge Hospital, Springfield, Mo.

indicated in neither. However, surgical intervention was required for renal obstruction in both of the cases reported in the same year by Harris. Hydronephrosis in these was apparently secondary to "lateral hydrostatic pressure of the urine-filled stump" upon the functional ureteral limb. Resection of the accessory ureter resulted in complete symptomatic relief to both patients.

For completeness sake, mention of a blind single ureter with a contralateral solitary kidney is relevant (see case 1). Renal aplasia implies a functionless ureter with a bladder orifice but without connection with the amorphous renal mass above. This is not to be confused with unilateral renal agenesis: absence of the kidney, ureter and corresponding half of the trigone. The latter syndrome is commonly associated with anomalies of the genital tract and failure of formation of the adrenal gland. Whether a kidney is aplastic or agenetic, its mate always develops compensatory hypertrophy.

CASE REPORTS

Case 1. J. R. S., a 40 year old married white female was admitted to Burge Hospital on the Urological Service of Dr. Joseph G. Siceluff for genito-urinary examination. Three weeks prior to hospitalization, the patient had consulted her family physician because of dull lower abdominal pain. Both excretory and retrograde urograms had failed to demonstrate a right kidney.

On admission, the patient was asymptomatic. No history suggestive of urinary tract disease could be elicited. Complete physical examination revealed no abnormality.

Cystoscopic examination demonstrated a normal posterior urethra, urinary bladder and ureteral orifices. A 5F catheter passed readily for 27 cm. on the left. The right sided catheter could not be introduced beyond 15 cm.; no urine was obtained from this catheter.

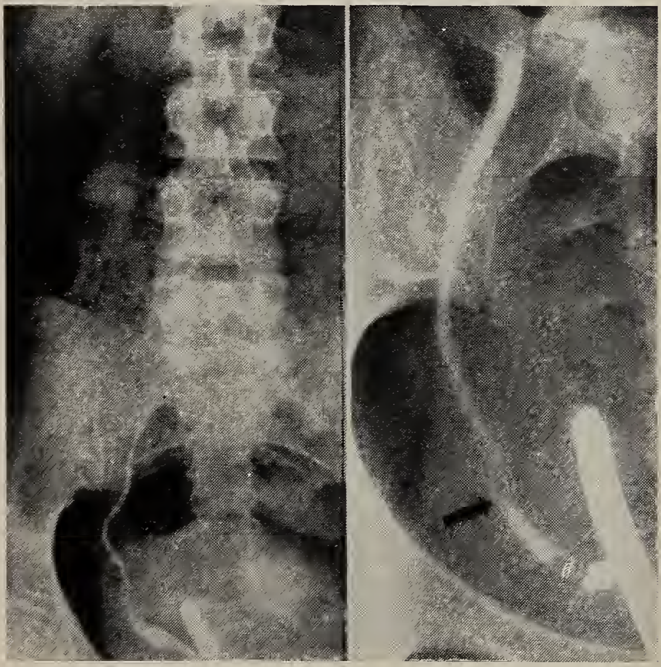

Fig. 1. A. Case 1. Retrograde ureterogram shows a single blind ureter of normal caliber and position. The dye column terminates at the level of the first sacral vertebra. No evidence of a renal shadow could be identified.
B. Case 2. Retrograde ureterogram revealing bifurcation of the pelvic spindle of the ureter. The diminutive blind-ending segment is lateral to the functional ureteral limb.

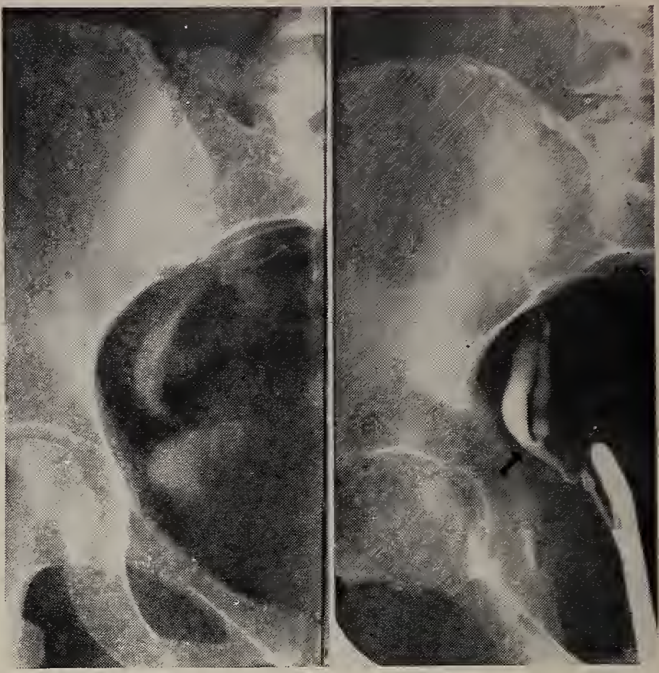

Fig. 2. A. Case 3. Excretory pyelogram (15 minute film) demonstrating a sausage shaped collection of opaque medium superimposed upon the well demarcated shadow of the distal ureter. The nature of this sac was indeterminate on the basis of the intravenous study.
B. Case 3. Retrograde opacification reveals definite bifurcation. The outer ureteral segment terminates abruptly at the level of the second sacral body.

A left pyeloureterogram was unremarkable. Contrast medium instilled through the right catheter flowed back into the bladder. A bulb catheter was inserted into the right orifice; dye injection opacified a blind ureter, 15 cm. in length (see fig. 1A). Detailed radiographic studies failed to show evidence of a right kidney shadow. A diagnosis of blind ureter with renal aplasia was assumed. Surgical exploration was not considered justified.

Case. 2. K. S. M., a 29-year-old white female, an army dependent, was admitted to the Urological Service of Dr. Joseph G. Siceluff at Kennedy General Hospital, Memphis, Tennessee. The patient was a normally developed, healthy individual who stated that during the last three years she had undergone repeated ureteral dilatations for a right sided stricture. Urinary tract symptoms were first noted following an appendectomy.

Physical examination revealed no significant findings. At cystoscopic study, a mild chronic cystitis was identified. No abnormality of the left upper urinary tract was found. A catheter was passed with difficulty to the right renal pelvis. This contained 42 cc. of cloudy, pale urine. A right pyeloureterogram revealed severe stricture of the right mid-ureter with hydroureter and hydronephrosis above the site of the stricture. Elongation of the upper portion of the ureter was also noted.

A short, narrow, blind-ending accessory ureter originating just above the ureterovesical junction constituted an incidental finding (see fig. 1B). The patient refused treatment and was lost to follow-up.

Case 3. B. S. B., a 47 year old white married female was referred to the Department of Radiology, Burge Hospital, by Dr. Henry F. Knabb, Jr., for excretory pyelography. History was as follows: hysterectomy had been performed three years previously for menometrorrhagia. Chief complaints were right costovertebral angle pain of recent onset and urinary frequency. Bimanual palpation of the right kidney elicited pain. Urine and blood studies were normal.

An intravenous pyelogram suggested early pyelectasis of unknown etiology on the right. Films exposed 15 minutes following Urokon injection revealed an abnormal sac-like structure parallel to and associated with the pelvic spindle of the left ureter (see fig. 2A).

Four days later, the patient returned to Burge Hospital for urologic study by Dr. Joseph G. Siceluff. Cystoscopically, no abnormality of the lower urinary tract was discovered. Catheters passed readily to both renal pelves and a rhythmic effluent of clear urine was obtained.

Right retrograde urography confirmed the presence of pyelectasis and suggested ureteropelvic junction embarrassment by an anomalous vessel or band.

The left ureteral orifice was blocked with a bulb catheter and ureterograms were obtained in the supine and oblique positions. The left ureter bifurcated approximately 3 cm. above the ureterovesical junction. A blind-ending ureter, 6 cm. in length and 1 cm. in diameter, filled readily with contrast medium (see fig. 2B). This was situated lateral to the functioning ureter. No treatment was justified in the absence of symptoms or signs referable to the blind accessory ureter.

Case 4. T. M. L., a 47 year old white male, was referred to the University of Kansas Medical Center with an 18 months history of intermittent dysuria, pyuria and fever. Episodes had responded satisfactorily to antibiotic therapy. Excretory pyelograms were reported by the local physician to have been negative.

Urinalysis during a bout of dysuria and fever revealed pus and red blood cells. Urine culture contained hemolytic staphlococcus aureus and a moderate growth of enterococcus.

Retrograde urographic studies demonstrated bifurcation of the right ureter at the level of the third sacral segment (see fig. 3A). The lateral ureteral segment was of usual caliber and communicated normally with the solitary kidney above. The medial limb of the bifid ureter was blind and terminated in a bulbous enlargement at the level of the fifth lumbar body (see fig. 3B).

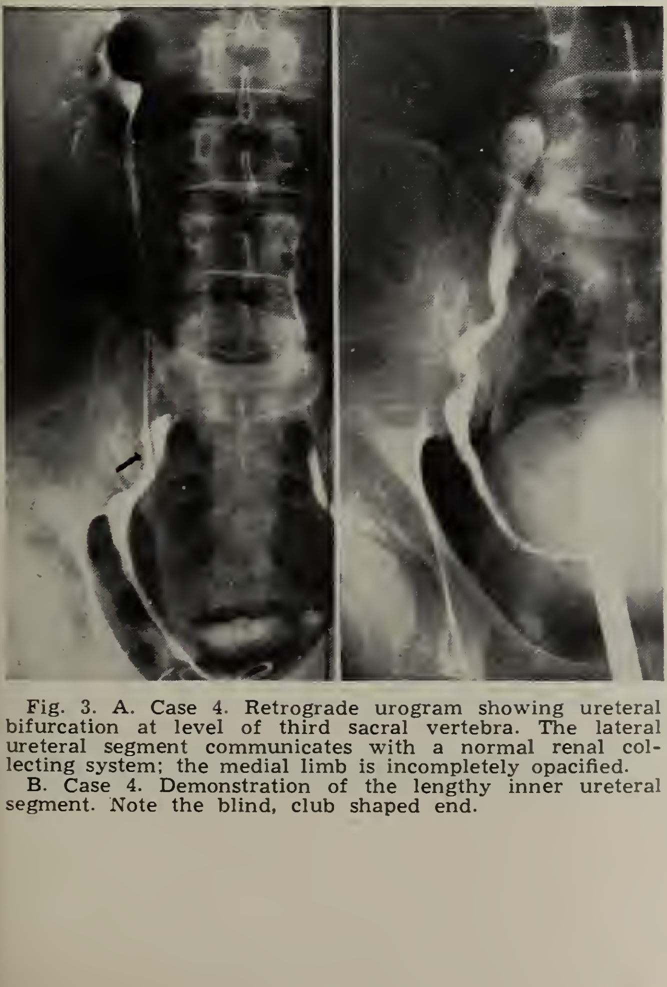

Fig. 3. A. Case 4. Retrograde urogram showing ureteral bifurcation at level of third sacral vertebra. The lateral ureteral segment communicates with a normal renal collecting system; the medial limb is incompletely opacified.
B. Case 4. Demonstration of the lengthy inner ureteral segment. Note the blind, club shaped end.

Operation confirmed the presence of the accessory ureter: "approximately 10 cm. in length and ending in a blind sac." Histologic examination of the excised specimen revealed mild chronic ureteritis. The patient was asymptomatic at a six month postoperative recheck visit.

DISCUSSION

Analysis of the three preceding cases of blind accessory ureter warrants conclusions of limited scope, some divergent to recorded experience.

Firstly, from a diagnostic viewpoint, the inability of intravenous or routine ascending pyeloureterograms to demonstrate these anomalies has been stressed. Nevertheless, the single case of our series in which we had access to excretory studies provided excellent delineation of the blind segment (see fig. 3) and stimulated this presentation. Correlated with a high index of suspicion, we feel that a technically satisfactory excretory study may be diagnostic.

Secondly, as regards the significance of blind ureters: the consensus of opinion suggests that resection is ordinarily indicated. However, in two of three of of our cases, the closed ureteral limb constituted an incidental finding of no clinical importance. That the blind segment in the third case operated on greatly exceeded the others in extent may be noteworthy.

In common with the majority of similar cases previously described, our material demonstrates no predilection for age, sex, right or left half of urinary tract or medial or lateral relation to the companion ureter. All were unilateral malformations; all joined the functioning ureteral limb within the pelvis; all paralleled the complete segment in distribution.

SUMMARY

Blind accessory ureter is a distinct clinical entity of rare occurrence. Three typical examples of this congenital anomaly are presented. A case of blind single ureter (renal aplasia) is described.

Note: The authors wish to express their appreciation to Galen M. Tice, M.D., Director, Department of Radiology, University of Kansas Medical Center, for the privilege of reporting Case 4.

Burge Hospital

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TREATMENT BEGINS ON THE STREET

. . . death following acute trauma results from alterations in physiological processes which, if promptly recognized, can often be obviated by appropriate procedures or replacement therapy. Every surgeon who treats the severely injured regardless of his surgical specialty should be prepared to institute emergency life-saving measures in any part of the body. —Oscar P. Hampton, Jr., M.D., St. Louis, *Southern Medical Journal.*

Gallbladder Disease

An Analysis of 254 Consecutive Cases Treated Surgically

T. E. FERRELL, M.D.; R. D. DUNCAN, M.D., AND D. F. GOSE, M.D., *Springfield*

THIS GROUP OF CASES has been operated upon by the authors in the past four and a half years. The series will be divided into acute cholecystitis, chronic cholecystitis and tumors of the gallbladder or biliary ducts. No reference will be made in this paper to acute or subacute pancreatitis treated by decompression of the biliary system.

ACUTE CHOLECYSTITIS

There were thirty-nine cases of acute cholecystitis manifested preoperatively by pain and tenderness in the right upper quadrant and usually some muscle rigidity, and by fever (usually from 100 to 103 F.). Often, following administration of an opiate for pain, a large, tense gallbladder can be palpated below the costal margin. These patients are usually nauseated and vomiting may or may not be present. Leukocytosis is present in varying gradations.

Twenty-two of these patients had acute cholecystitis with cholelithiasis and underwent cholecystectomy alone. Seven of the thirty-nine cases had cholecystectomy with common duct exploration for varying degrees of obstructive jaundice or some definite indication for exploration of the common duct. Six of the thirty-nine cases had gangrenous cholecystitis with cholelithiasis, two of which had perforated preoperatively with resultant localized peritonitis. All of the gangrenous cholecystitis cases underwent successful cholecystectomies. Four cases had empyema of the gallbladder with stones. Cholecystectomy was done in two cases of empyema and in two cases cholecystotomy alone was done, it being technically impossible to remove the gallbladder, even in a retrograde manner after first aspiring the contents, as is practically always done in distended gallbladders.

The percentage of acute cholecystitis in this series is 15 per cent. There were twenty-nine females and ten males, a ratio of approximately 3:1. In only one group did the males equal that of the females and that was in the group of six cases of gangrenous cholecystitis, there being three males and three females. The average age incidence of the thirty-nine cases of acute cholecystic disease was 58.71 years. There was one death in this group. This was a 74 year old woman who was extremely toxic on admission to the hospital and in whom fluid and electrolyte balance, plus antibiotics failed to cause a regression or improvement in her condition. Because of the progressive symptoms operation was done. The patient died of anuria on the fifth postoperative day.

CHRONIC CHOLECYSTITIS

There were 204 cases of chronic cholecystitis and, of these, 137 cases had chronic cholecystitis with cholelithiasis in which cholecystectomy alone was performed. There were fifty-six cases of chronic cholecystitis with cholelithiasis in which cholecystectomy and choledochotomy was carried out. Five cases of chronic cholecystitis without stones were encountered. Of these, there were four females and one male. The average age incidence of the chronic cholecystitis cases was 50.8 years. Four cases of chronic cholecystitis had associated or coexisting duodenal ulcer. Two of these had cholecystectomy with gastroenterostomy and vagotomy. One had cholecystectomy and subtotal gastric resection and the fourth case had cholecystectomy and gastroenterostomy without vagotomy. There were three females and one male in this group. The average age incidence of these patients with combined lesions was 64.5 years, the ages ranging from 58 to 72 years.

The remaining two cases of the chronic cholecystitis series had, in addition to their gallbladder disease, biliary fistulae. One of these had an external biliary fistula following a cholecystostomy which had been done elsewhere one year previously for acute cholecystitis. At operation there was a large stone wedged in the cystic duct which apparently had not been removed at the first operation. Had it been removed, I believe this patient would have made an uneventful recovery from her first operation. The other of these cases had a cholecystogastric fistula. This patient was successfully operated on, but expired six weeks postoperatively of coronary thrombosis.

CARCINOMA OF THE GALLBLADDER

There were ten cases of carcinoma of the gallbladder or biliary ducts in this series. All ten cases had cholelithiasis. Four were males and six were females. The average age incidence was 67.9 years. There were two hospital deaths in this group; both occurred in patients who had been explored because of obstructive jaundice. The first case was that of a white male, aged 53, who expired thirty-four days postoperatively from inanition and the second was a 69 year old white male who expired forty-seven days postoperatively from toxicity and starvation.

There was one benign papilloma of the fundus of the gallbladder in the entire series. This was a white female, aged 47, who was treated by cholecystectomy alone.

COMMON DUCT EXPLORATION

Excluding the ten cases of malignancy encountered, there remain 244 cases treated surgically in which common duct exploration was done in sixty-three cases, or 26 per cent of the series. In comparison with other parts of the country this seems conservative. However, we explore all common ducts in which (1) there is a history of jaundice or the presence of jaundice; (2) there is a dilated or thickened common duct; (3) there is a common duct with a stone or other suspicious mass palpable; (4) there is a history of biliary colic and small stones or sand found in the gallbladder; (5) there is a small contracted gallbladder with or without stones in which a history of biliary colic is obtained and in which the gallbladder picture does not seem adequate to explain the severity of symptoms, or (6) there is a subacute pancreatitis associated with cholecystitis. All cases of common duct exploration are opened near or distal to the cystic duct and the patency of the ampullae of Vater determined by the graduated Bake's dilators. If resistance is encountered at the ampullae so that the smallest of the Bake's dilators cannot be introduced, a transduodenal approach is carried out and the sphincter cut under direct vision. This was necessary in five of our sixty-three explorations. In such cases, after dilatation, a long T-tube is placed in the common duct, the long limb extending into the duodenum. Such T-tubes in the presence of fibrosis or stricture of the sphincter of Oddi are left in place for a minimum of three to six months or longer and the patient or relatives are instructed as to how to care for and irrigate the vertical limb of the T-tube. When the short T-tube is used in the common duct exploration cases, it is left *in situ* for a minimum of nine days, when a cholangiogram is done prior to removal of the T-tube. The vertical limb of the T-tube is connected to a bottle at the patient's side and not to one sitting on the floor, as this would siphon off the bile. On the second or third postoperative day the T-tube is clamped one hour each morning and evening, lengthening the time of clamping until it is allowed to drain one hour morning and evening. On the ninth day or soon thereafter a choledochogram is done. If no evidence of remaining stone or pathology is found, the T-tube is removed the following day. Should there be a negative shadow in the duct system, the choledochogram should be repeated because this may be due to an air bubble introduced from the T-tube the previous day. To minimize this possibility, one should aspirate the vertical limb of the T-tube before injecting the diadrast contrast media.

Exploration of the common duct in this series has not increased the morbidity or mortality at all and we feel that it probably is better to err on the side of opening more ducts than to err on the side of conservatism.

There are procedures of common duct pressure readings to test the sphincter tone mechanism and operating room cholangiogram which are routinely carried out. We do operating room cholangiograms when indicated only and so far have only estimated the intraductal pressure in cases of dilatation of the common duct.

The gallbladder bed is closed in all of our cases and the vertical limb of the T-tube brought out through a stab wound in the common duct exploration cases. We feel it is better to lay a Penrose drain to the foramen of Winslow and away from the tied cystic duct, as such drains may be removed the second or third day without discomfort, and where anomalous cystic arteries and bile ducts are present it can give one early valuable information.

One patient in whom the T-tube was removed on the seventh postoperative day went into profound shock with acute pain in the right upper quadrant and required supportive therapy for three hours. This was attributed to acute bile peritonitis.

Another case in this series went into profound shock four hours postoperatively because of secondary hemorrhage. On reopening the abdomen it was found that an anomalous cystic artery was present and hemorrhaging. The main cystic artery was securely tied. However, the anomalous or second cystic artery, which originated from the hepatic artery about one inch below the one tied, was bleeding freely. It was secured by ligature and the patient had an uneventful convalescence.

We have operated on several patients in whom jaundice was present and found at surgery a dilated common duct and on opening the common duct found no stones or obstruction in the duct or at the ampullae. We feel that the anesthetic had caused sufficient relaxation of the sphincter, together with the intraductal pressure, to force the stone through the sphincter into the duodenum.

We feel that all cases of jaundice coming to surgery should have liver biopsies. Previously we have taken biopsies only in those cases with obvious liver disease and, of course, in the malignant cases. We feel that added information can be gained by following this procedure, as hepatocellular and obstructive jaundice often are impossible to differentiate preoperatively and at times difficult at operation. Also, they may coexist in the same patient.

As mentioned, there was one death in the thirty-nine cases of acute cholecystitis. In the 204 cases of chronic cholecystitis there were five deaths:

1. A 75 year old white female operated on for cholecystitis and cholecystogastric fistula died in the hospital six weeks postoperatively of coronary thrombosis.
2. A 62 year old white female died sixteen days postoperatively of myocardial failure and atelectasis.
3. A 61 year old white female died ten days postoperatively of pulmonary embolism.
4. A 59 year old white female died thirty-one days postoperatively of uremia.
5. A 69 year old white male expired fifteen days postoperatively of pulmonary embolism.

SUMMARY

A summary of 254 consecutive cases of cholecystitis surgically treated has been presented, together with indications for common duct exploration and some of the complications we have encountered and how they have been handled. Common duct exploration has not increased the morbidity or mortality of our cases and we feel it is better to err on the side of more common duct explorations than to overlook pathology in the common duct or ampullary region.

The average age incidence of 204 cases of chronic cholecystitis was 50.8 years. The average age incidence of the thirty-nine cases of acute cholecystitis was 58.71 years. The average age of the ten cases of carcinoma of the gallbladder was 67.9 years. The mortality rate of this series is approximately 2 per cent, excluding the malignancies.

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Toxic Reactions From Methimazole

Survey of Literature and a Case Report of Agranulocytosis Occurring During Methimazole (Tapazole) Therapy

F. T. H'DOUBLER, JR., M.D., AND PETER B. H'DOUBLER, B.S., *Springfield*

CASES OF TOXIC reactions following the use of tapazole have been reported. These reactions may be in the form of a blood dyscrasia, a dermatitis, painful joints or nausea and vomiting. Of these reactions, agranulocytosis is the most dangerous. We have had such a case and it has prompted a survey of the literature as to the incidence of toxic reactions from the administration of tapazole. The purpose of this paper is to call attention to the ever existent possibility of toxic reactions from tapazole medication and to present a case of agranulocytosis induced by tapazole medication with recovery following cessation of the drug.

Since 1949, methimazole, or 1-methyl-2-mercaptoimidazole (tapazole) has been used effectively as an antithyroid drug. Experiences with this drug have been reported by Bartels and Sjogren,[1] Croke and Berry,[2] Specht and Boehme,[3] Irwin et al,[4] Reveno and Rosenbaum,[5] Beirwaltes,[6] Hallman and Bondy,[7] Taylor et al,[8] Rosenbaum,[9] and Stone et al.[10] Our material, along with that of others, is tabulated and summarized in the accompanying table. The duration of treatment and the amount of drug taken each day by the patients included in this survey were not tabulated as this information was not within the intended scope of the paper.

RESULTS OF SURVEY IN TABULAR FORM

		Reaction Types						
Reference number	*Cases reported*	AGRANULOCYTOSIS	GRANULOCYTOPENIA	THROMBOCYTOPENIA	NAUSEA & VOMITING	DERMATITIS	SORE THROAT & PAINFUL JOINTS	*Totals*
1	100	—	—	—	—	6	—	6
*2	1	1	1	—	—	—	—	—
†*3	1	†1	—	—	—	—	—	—
4	45	—	1	—	1	1	—	3
5	18	—	—	—	—	—	—	0
6	10	—	—	—	—	—	—	0
7	35	—	—	—	—	—	—	0
8	23	—	—	—	—	—	—	0
9	31	1	—	—	—	—	—	1
10	24	—	1	1	2	4	—	8
Our Series	116	1	2	—	—	—	1	4
Totals	404	2	4	1	3	11	1	22
Per cent of totals		0.5	1.0	0.2	0.7	2.7	0.2	5.4

* These cases are not included in totals as they represent case reports only and not series of cases.

† Resulted in death.

When the drug reaction was manifested in several ways (as by agranulocytosis and sore throat) only the major manifestation was counted in order not to distort the totals.

Since May 1951, we have been using tapazole in the preparation of our toxic goiter patients for surgery. This drug has been well tolerated by most patients to whom it has been administered and usually the patient shows a favorable clinical response. We have been just as cautious in the administration of this drug as we have been with the administration of thiouracil and propylthiouracil. We routinely give the patient only one week's supply of the tapazole at each visit with instructions to return in a week for a routine white count and differential count and possibly another supply of tapazole. Also, if the patient develops any of the following signs or symptoms, fever, chills, rash, sore throat, painful joints or nausea and vomiting, he is instructed to stop taking the medication and to return immediately for blood studies and examination. If the white count goes below 3,000 or the total number of granulocytes is below 40 per cent, the drug is discontinued until this situation reverses itself. We have used tapazole in 116 cases and have had four drug reactions, making the total percentage slightly less than 4 per cent.

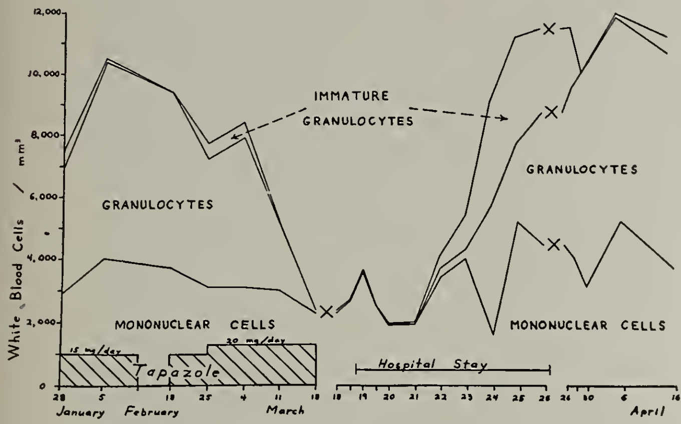
In one instance, after the patient had been on 5 mg. of tapazole four times daily for a period of only five days, she complained of a sore throat and painful joints of about twelve hours duration. During this five day interval, her white blood count dropped from 10,750 to 5,600; however the differential count remained normal. The tapazole was immediately discontinued and the patient was given intramuscular penicillin and also penicillin troches. Two days later the white blood count had risen to 10,550 and her symptoms had completely subsided.

Two other cases manifested granulocytopenia. Each case was diagnosed only after a routine weekly blood study. The most severe, apparently induced, drug reaction was an agranulocytosis which is the case being reported.

CASE REPORT

Mrs. G. B., a 36 year old white female, was first seen on January 28, 1953. She gave a history of having been treated for a toxic goiter with Lugol's solution ten years previously with temporary improvement. From that time on, she had been bothered slightly with nervousness, palpitation, tachycardia and heat intolerance with excessive perspiration, but these symptoms had become much more severe in the last three months. Recently, she had noted an increase in the size of the thyroid gland with occasional hoarseness but with no brassy cough or dysphagia. She was not aware of any changes in the appearance of her eyes. She experienced insomnia despite her complaint of great exhaustion and fatigue. Most of the time she was quite cross and irritable and crowds of people bothered her. There had been a recent weight loss even though her appetite had been ravenous. She noted no hot flashes, loss of libido nor change in menses. The past history was noncontributory except for the diagnosis of toxic goiter having been made ten years previously. The family history revealed that one sister had had a toxic goiter.

Physical examination showed an intelligent, cooperative, but nervous white female who appeared several years older than the stated age of 36. She was five feet six inches tall and weighed 170 pounds. Her hair was fine and brown with considerable greying. On palpation, a firm, nontender, multinodular gland was felt. The thyroid was estimated to be two and a half times the normal size. Laryngoscopic examination was normal. There was no exophthalmos, widening of the palpebral fissures, lid lag, inability of convergence or absence of wrinkling of the forehead. Neuromuscular examination revealed mild but definite quadriceps weakness and a fine tremor of the outstretched hand. The patient was nervous and cried easily. Cardiac examination showed a regular rhythm with a rate of 84 beats per minute. No murmurs were heard but there was an accentuation of the mitral first sound. No cardiac enlargement was noted. The blood pressure was 140/80. The skin was warm and moist and the palms wet. Physical examination was otherwise essentially normal. Basal metabolic rate determinations the following morning were plus 28 per cent and plus 30 per cent. The blood cholesterol was 130 mg. per cent (140-170 mg. per cent being the range of normal). Clinical blood studies revealed the following: hemoglobin 79.9 per cent, 4,900,000 red cells, 7,500 white cells with 52 per cent neutrophils, 37 per cent lymphocytes, 2 per cent eosinophils, 8 per cent stabs and 1 per cent transitional. The urinalysis was normal and the Kahn test was negative.



Because of the degree of thyrotoxicosis, treatment was begun with 5 mg. of tapazole three times daily and phenobarbital 15 mg. four times daily preparatory to surgery. She was given careful instructions to stop taking the tapazole immediately and report back if she had any of the previously mentioned signs or symptoms. She was also told to come back in one week for a routine white count and differential count. She returned in one week, and as her blood studies were normal, she was given another week's supply of tapazole. After that, we did not see her for two weeks but on February 18, 1953, she returned and was again started on the original medication, as the blood count was satisfactory. On the following week, the dosage of tapazole was increased to 20 mg. daily and this was continued on March 4, her next weekly visit. On March 11, 1953, her white count was 5,200 with a total of 46 per cent granulocytes.

When she returned for her weekly count on March 18, 1953, she stated that two days after the last visit, she developed a sore throat, after which she noticed fever, chills, sore mouth and sore rectum. Despite the fact that she had been instructed to return immediately if she experienced any of the toxic manifestations of the drug, she persisted in taking her medication and in ignoring these symptoms for five days. Physical examination revealed an acutely ill patient with an inflamed throat and mouth; an inflamed rectum, perineum and vulva with extension to the urinary meatus, probably initiated by mechanical irritation (repeated enemata). Exudate from the mouth and rectum, revealed a necrotic exudate showing no pus cells. Her white count and differential count on this date (March 18, 1953) were white count 2,350 with 2 segments, 1 eosinophil, 2 monocytes and 95 lymphocytes.

An injection of penicillin was given intramuscularly and she was sent immediately to a local hospital. Her temperature on admission to the hospital was 101.4 F. with a pulse rate of 108 per minute and respirations 22 per minute. The highest point to which her temperature rose during her stay in the hospital was 101.6 F. The accompanying graph shows her white blood counts and differential counts throughout her clinical course. The first blood count at the hospital showed a complete agranulocytosis. On the third hospital day granulocytes began to appear in the blood, as can be seen in the graph.

While in the hospital, the patient was given full coverage with penicillin to protect her against infection while she had no granulocytes. Of course, the tapazole was discontinued. The patient was also given pentnucleotides intramuscularly and solu-B intravenously. It is, however, our feeling that discontinuing the tapazole and giving the penicillin were the important features of her treatment.

Her convalescence was uneventful and on April 9, 1953, the patient underwent thyroidectomy. We wished to take advantage of whatever antithyroid effect might have taken place and did not choose to wait a long time and then again try to prepare her for surgery with tapazole. The surgical tissue was reported as showing diffuse hyperplasia and chronic thyroiditis. Her postoperative course was uneventful and she left the hospital five days after operation. She has been seen frequently since and has remained in a euthyroid state.

REVIEW OF CASE REPORTED

It appears that this patient's agranulocytosis was induced by the tapazole medication inasmuch as with the cessation of the drug, the white count and differential count soon returned to normal. This case is particularly interesting in that only two days after having a normal white count and differential count, she had all the signs and symptoms attributed to an agranulocytosis.

SUMMARY

The incidence of toxic reactions of all types from tapazole in 404 patients is found to be slightly more than 5 per cent. A case of agranulocytosis, occurring during administration of methimazole (tapazole) with recovery following cessation of the drug, is reported.

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Infectious Mononucleosis Treated With Cortisone

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INFECTIOUS MONONUCLEOSIS is a disease for which there has been no effective specific therapy, and which can at times present a serious problem. Though the prognosis in the large majority of cases is good, recovery is often slow, resulting in an economic burden and, occasionally, serious complications occur including hepatitis, thrombocytopenia, myocarditis, spontaneous rupture of the spleen, involvement of the central or peripheral nervous system or both. There have even been several instances of death.[1]

The patient whose case is reported was rather severely ill with the disease and was making poor progress. Since there are many reports in the literature of failure of the various antibiotics to effect a cure and since this patient was not improving significantly with supportive and symptomatic treatment plus the antibiotics, it was decided to try cortisone.

CASE REPORT

J. T., an 18 year old white man, was first seen at home at 4:00 a.m. on January 2, 1953, during a local mild epidemic of upper respiratory infections and sore throats. Four days previously he had developed chills and fever, slight sore throat, cough and lower substernal and precordial pain, all of which had persisted. He was acutely ill. His temperature was 102.5 F., pluse 100, throat was slightly inflamed and there was a faint systolic murmur at the apex. The rest of the examination was essentially normal. His spleen was not palpable at that time. He was thought to have an acute respiratory infection and was given 600,000 U. of aqueous procaine penicillin intramuscularly and started on Gantrisin by mouth. About 2:00 p.m. he vomited once. The next day he complained of more chest pain and was more feverish so he was admitted to St. John's Hospital the evening of January 3, 1953, for further study and treatment.

At the time of admission the history was as given. In addition he mentioned he had been working long hours and for the last month had been feeling draggy, nervous and irritable. The inventory of symptoms by systems added nothing significant.

On physical examination the following positive findings were noted. The patient was acutely ill. Temperature was 103.6 F., pulse 124, blood pressure 128/46. He was a muscular well nourished young man who appeared to have been in good health previously.

Nose: The mucous membranes were somewhat inflamed and swollen and there was some mucopurulent discharge.

Mouth: The teeth were in bad condition with numerous caries and poor oral hygiene. The tonsils were absent. The pharynx was inflamed.

Heart: There was a soft systolic murmur heard best at the apex, faintly at the pulmonic area.

Abdomen: The spleen was not palpable until two or three days after admission.

Skin: There was a finely mottled, scarletiniform rash on the arms and legs.

Lymph nodes: There were a few small discrete nodes palpated in the right posterior cervical chain.

The laboratory examination showed red blood cells 4,190,000, Hgb. 13 gm., white blood cells 6,050; differential count showed stabs. 10, segments 31, lymphocytes 51, monocytes 6, eosinophils 2. The lymphocytes were atypical, consistent with infectious mononucleosis. Heterophile antibody titer (using guinea pig kidney adsorption technic): January 4, 1:896, and January 8, 1:57,344. Routine urine, electrocardiogram and 6 foot chest x-ray were all normal.

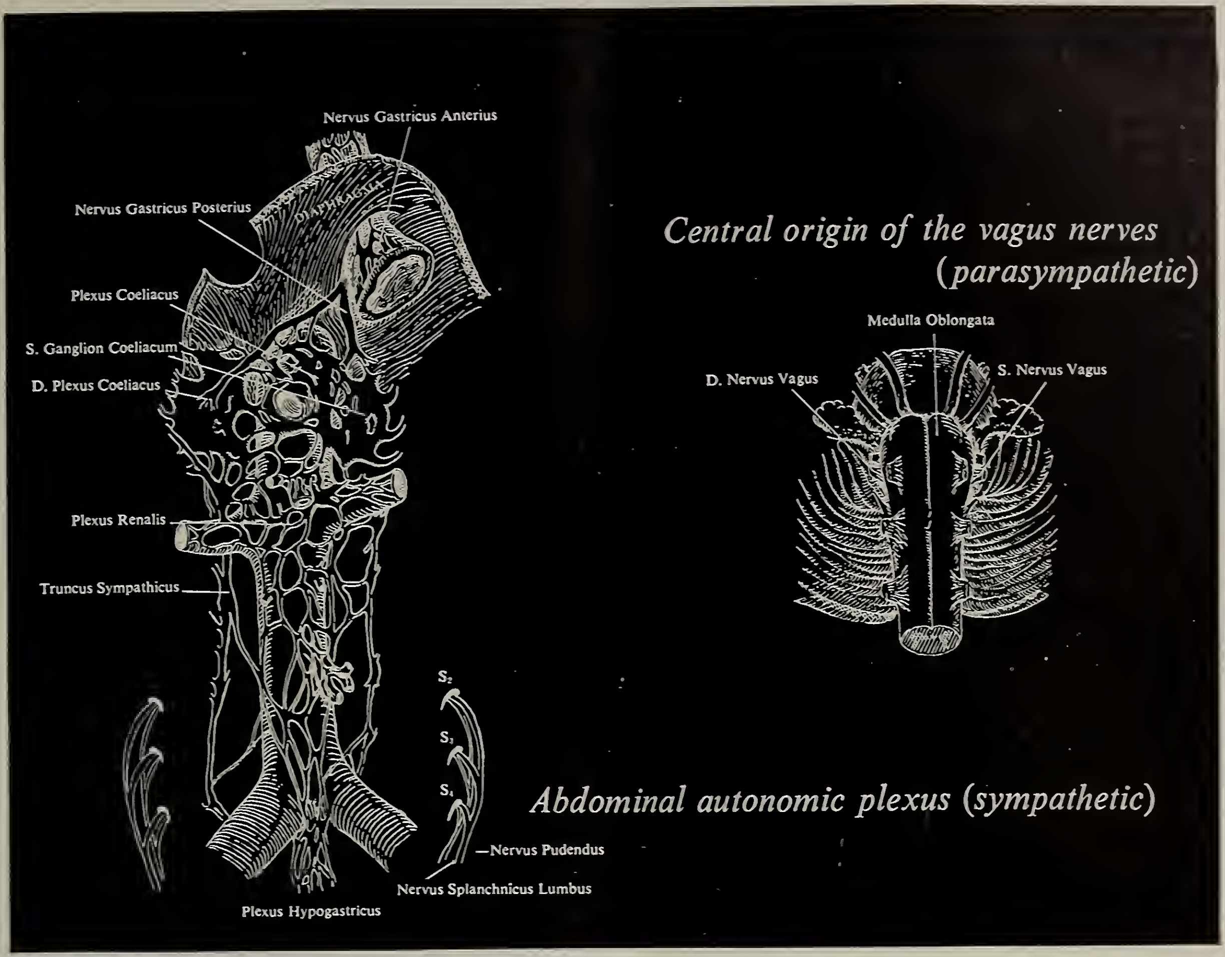
The diagnosis of infectious mononucleosis was made, but because it was felt there might be some element of secondary infection present, he was kept on the Gantrisin, 1 gm. four times daily, and given more penicillin for a day or two, then they were discontinued and aureomycin, 250 mg. four times daily, was given instead. His temperature continued to spike to from 101 to 103 F. with an occasional dip to 98.6 F. He felt generally weak and ill, had no appetite, would not eat and vomited a few times. His throat became more sore and he developed some small superficial white ulcerations in the pharynx. He was given daily intravenous vitamin B and C after the first day or two. Toward the end of the first week of hospitalization he felt a little better and began to eat a little. His rash had disappeared and his throat seemed somewhat less sore, but he continued to run a fever to 102 F. He was worried about the expense and since it was felt he could be given satisfactory nursing care at home he was discharged on January 10, one week after admission.

At home he became worse with severe sore throat, continuous fever to 103 F. and more anorexia and vomiting; so on the afternoon of January 13, he was readmitted to the hospital. At the time of this second admission his temperature was 100.6 F., pulse 104. There were three small white areas of ulceration on the tonsilar pillars and soft palate. He also had a generalized morbilliform rash over the entire trunk, less pronounced on the face, arms and legs. He was unable to eat because of his sore throat and anorexia and he was feeling weak and generally quite ill. There were no new lymph nodes palpable. The spleen remained palpable about 1½ inches below the left costal margin. The white blood cell count was 12,700; differential count: stabs. 5, segments 10, lymphocytes 85. The lymphocytes were still typical of infectious mononucleosis. The heterophile antibody titer was 1:114,688.

The evening of admission he was given 150 mg. of cortisone by mouth. The next morning he felt much better and his temperature was 98.6 F., pulse 96 and he was able to eat a good breakfast. He was given 150 mg. of cortisone morning and evening of the second day, 75 mg. twice a day the third day, gradually reducing the dosage until at the time of discharge he was taking 12.5 mg. twice a day.

Throughout the remainder of his hospital stay he continued to feel good, the rash faded, he developed a good appetite and, though the ulcerations in his throat were slow in clearing and he developed other small canker sores on his gums, they did not bother him. His temperature remained 98.6 F. or below and the pulse between 60 and 80.

On January 19, six days after readmission, his white blood cell count was 8,300; differential count: stabs. 3, segments 28, lymphocytes 63, monocytes 2, disintergrated cells 5. His heterophile antibody titer was 1:28,672.


Nervus Gastricus Anterius
Nervus Gastricus Posterius
DIAPHRAGMA
Plexus Coeliacus
S. Ganglion Coeliacum
D. Plexus Coeliacus
Plexus Renalis
Truncus Sympathicus
S_2
S_3
S_4
—Nervus Pudendus
Nervus Splanchnicus Lumbus
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He was discharged January 21, with instructions to continue the cortisone gradually tapering it off.

He was checked at frequent intervals in the office and had no more difficulty. On January 29, his white cell count was 9,200, heterophile antibody titer 1:448. He had been taking cortisone 12.5 mg. daily and was told to cut it to 12.5 mg. every other day. The spleen was not palpable at this time and there were no enlarged nodes. He still had three small canker sores in the buccal trough. He continued to develop new small canker sores while the older ones healed. They finally disappeared entirely about the first of March. On February 5, the cortisone was discontinued and on February 26, the heterophile antibody titer was 1:224 and the white blood cell count 9,900; differential count: stabs. 12, segments 45, lymphocytes 31, eosinophils 3, monocytes 4, disintergrated cells 5. He was discharged and allowed to return to work. He has been seen on numerous occasions since for nonmedical reasons, and has maintained apparently excellent health to date.

DISCUSSION

While drawing conclusions from a single case is seldom justified, nevertheless there can hardly be much doubt of the efficacy of cortisone in this case in bringing about a rapid clinical improvement in an individual who had been consistently ill until the time of administering the cortisone. On searching the literature to see whether others had had similar results surprisingly few reports of cases of infectious mononucleosis treated with cortisone or ACTH were found, but the clinical response in those cases reported was comparable to the case reported here.

In 1950 at the Mayo Clinic, Hubler et al. treated a case with an encephalitic picture with a total of 600 mg. ACTH over a period of six days. This patient was apparently quite ill with encephalitic signs and symptoms including convulsions and coma for a period of about ten days before the ACTH was started. He improved rather rapidly during the next few days to the point of being asymptomatic on discharge, ten days after starting the ACTH. However, it was felt by the authors that this was within the expected course of the disease, and no credit was given to the ACTH for the successful outcome.[2]

In 1950 at Yale University, Saunders and Adams in studying the effect of adrenocortical extract (ACE) and ACTH on the peripheral leukocyte picture found that in a small group of patients with infectious mononucleosis after a single injection of ACTH intramuscularly the reduction in absolute numbers of circulating lymphocytes and eosinophils was percentagewise essentially the same as in normal adults and there was no significant change in the heterophile antibody titer. Apparently there was no attempt to actually treat these patients with ACTH, and there was no comment on the clinical response.[3]

In 1952 Janbon and Bertrand in Montpellier, France, reported a case of infectious mononucleosis with jaundice treated with cortisone orally, (200 mg. the first day, 100 mg. daily the two following days) following which the fever broke within six hours with rapid clinical improvement.[4] These authors have since reported four more patients treated with cortisone with striking results, using 100 to 200 mg. daily for only two or three days starting the therapy at the height of the disease. The temperature became normal within less than forty-eight hours after the first dose, the enlarged lymphatic tissue regressed rapidly, and one severely ill and jaundiced patient came out of a state of prostration the day after starting cortisone.[5]

In May of 1953, Doran and Weisberger[6] reported a case treated with ACTH. The patient was seriously ill and showed rapid improvement coincident with the use of ACTH.

The mechanism of improvement in these cases is not known but generalized perivascular infiltration with both normal and abnormal lymphoid cells and follicular hyperplasia of the lymph nodes are the prominent features of the pathologic picture of this disease, and cortisone is known to cause a suppression of lymphoid hyperplasia. Cortisone also has rather poorly understood nonspecific effects on inflammatory reactions in general, which effects, apart from the specific effect on lymphoid cells, are undoubtedly responsible for much of the improvement noted. Whether this influence on inflammation is due to an effect on cell permeability or whether it is due to some other effect on the intercellular or intracellular chemistry is apparently not known.

It is possible that a shorter course of cortisone therapy in the case reported here would have been adequate. Much shorter courses were used by Janbon and associates with apparently adequate results. The effects of ACTH are most likely due to the cortisone produced by stimulation of the adrenals.

It is of some interest that while giving cortisone in cases of bacterial infection without at the same time giving the antibiotics may result in spread of the infection with a deleterious effect on the course of the disease, apparently no such hazard is present in the case of infectious mononucleosis. This may represent some fundamental difference between bacterial and virus physiology, since infectious mononucleosis is thought by most investigators to be a virus infection.

In view of the results in this case and in those reported by others I feel that cortisone, hydrocortisone and ACTH should be given more extensive trial for treatment of infectious mononucleosis.

SUMMARY

1. A case of infectious mononucleosis with an unusually high heterophile antibody titer and more severely ill than usual, treated with cortisone with apparently striking benefit, has been reported.

2. The literature has been reviewed.

3. It is recommended that cortisone, hydrocortisone or ACTH be given more extensive trial in the treatment of infectious mononucleosis.

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Gitalin in Cardiac Failure

Report of Case With Large Maintenance Dose

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GITALIN, THE WATER SOLUBLE amorphous mixture of glycosides extracted from Digitalis purpurea, was first isolated in Germany forty-two years ago but received only limited use and study in this country until the last few years. Batterman, et al.,[1] reported on its use in 1951 and again[2] in 1952, Dimitroff, et al.,[3] in 1953, and Weiss and Steigmann[4] in 1954. These authors are agreed that gitalin offers a distinct advantage over all other digitalis preparations in its increased therapeutic range.

The "therapeutic ratio" for digitalis is determined by the formula,

$$\frac{\text{therapeutic (average digitalizing) dose}}{\text{toxic dose (average)}} \times 100.$$

Another method of determining this figure in patients already digitalized is by deliberately doubling the minimal therapeutic dose and finding the percentage of those who exhibit toxicity. The therapeutic ratio of gitalin as determined by both methods was reported by these different authors as approximately 40 per cent. The values found by Batterman[2] for other digitalis preparations were 67 per cent for whole leaf, 65 per cent for digitoxin, 64 per cent for Digoxin, and 63 per cent for lanatoside C. It can be seen from these findings that "patients who previously required approximately two thirds of the estimated or actual dose to be digitalized or maintained may now achieve restoration of cardiac efficiency with approximately one third of the toxic dose."[1] The obvious and important advantage of this is that, since in any single patient the therapeutic dose is not predictable and must be titrated to that patient's requirement, there is much greater chance of increasing the dose of gitalin safely to the desired level in that patient who requires a larger than average dose. Each patient needing digitalis may, of course, be that patient.

Such a patient was recently encountered and serves as an example of the use of gitalin in a difficult case in which no other forms of digitalis could have been used without development of toxicity precluding increase in the dose to a therapeutic level.

CASE REPORT

A. D., a 40 year old, 95 pound white woman, was first seen in 1948 complaining of dyspnea on effort and palpitation for over ten years. She gave the history of having had an illness called diphtheria at age 10 and another termed typhoid fever at age 18. However, details which she could remember suggested that one or both of these could have been rheumatic fever. She was found to have a presystolic crescendo rumble at the apex, right axis deviation on the electrocardiogram and enlargement of the pulmonary conus by x-ray. The diagnosis of inactive rheumatic heart disease with mitral stenosis and cardiac failure was made. She had been taking digitalis leaf for three years prior to that time and continued on Digoxin, adjusting the dosage with some improvement.

She was seen intermittently following this, gradually becoming increasingly decompensated and, beginning in 1951, having bouts of atrial fibrillation; these latter either converted spontaneously to sinus rhythm or were converted readily by administration of quinidine. Because it consistently caused nausea, even in small dosage, she would not continue quinidine in an effort to maintain sinus rhythm. During 1952 her decompensation became less and less amenable to treatment, episodes of respiratory infection necessitated repeated hospitalization and, in December, a mitral commissurotomy was performed. Subsequently, her cardiac failure was more easily controlled for a few months, but atrial fibrillation occurred more often and was more difficult to convert. In December, 1953, conversion could no longer be accomplished, either with quinidine or Pronestyl, and it was decided merely to control the rate with digitalis. However, she became more decompensated and developed moderate ankle edema and rather marked hepatic enlargement and pain. This was despite the use of routine measures and increasing the dose of whole leaf, to which she had been changed from Digoxin, to 0.2 gm. daily. Even on 0.1 gm. she had been nauseated, but this was thought to be due to the hepatic congestion. The increased dose aggravated the nausea and no slowing of the rate resulted. It was then felt that the tachycardia might be due to overdigitalization, but on discontinuing the medication for a few days there was no improvement.

TABLE 1

Date	*Heart rate*	*Dose started*
3-10	160	0.5 mg.
3-23	155	1.0 mg.
3-29	160	1.5 mg.
4-1	150	2.0 mg.
4-4	140	2.5 mg.
4-10	126	3.0 mg.
4-14	105	3.25 mg.
4-30	80	3.0 mg.
5-7	80	2.75 mg.
5-26	90	2.75 mg.
6-29	108	3.0 mg.

At this juncture, on March 10, 1954, gitalin was begun and the dose gradually increased, as indicated in table 1. It can be seen that only when the dose reached 3 mg. was the rate slowed appreciably, to 105. After five days of 3.25 mg. as a daily dose, the rate was 88 and there was no nausea or ankle edema and considerably less liver enlargement and pain. After eleven more days the rate was 80, but she had become slightly nauseated, so the dose was reduced to 3 mg. and one week later it was reduced further,

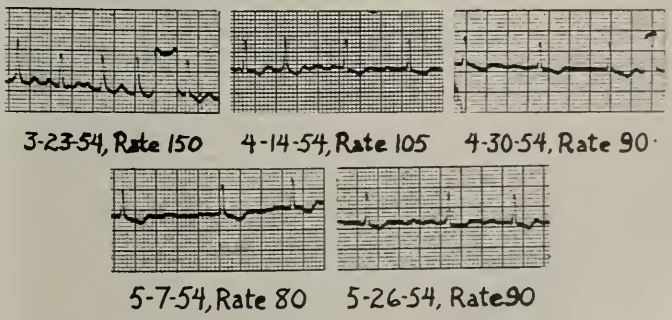

Fig. 1. Electrocardiograms (Lead II) showing differing degrees of digitalis effect, with calculated rates.

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to 2.75. It was raised again to 3 mg. when her pulse rate rose to 134 (falling to 108 after resting) and decompensation increased, after she had been caring for her ill husband for a week. This dose has been continued to the time of writing, two months later. The patient is without nausea, having a pulse rate of approximately 90, and fairly satisfactorily maintained on mercurial diuretics, intermittent ammonium chloride and aminophylline in large dose by mouth and in rectal suppositories. The degree of digitalis effect electrocardiographically is shown in figure 1, showing increased depression of the S-T segments as the maximum dose was approached and slightly less as it was reduced but no signs of marked digitalis effect at any time.

DISCUSSION

The dose of 3.25 mg. of gitalin in this slight individual is larger than any recorded by the authors previously mentioned. Batterman[1] lists one patient tried on 3 mg. who developed toxicity and one each (0.5 per cent of the forty-one tried on each dose) on 1.75, 2.0, 2.5 and 2.75 who were well maintained at those dosages. It was only after my patient had taken 3.25 mg. for two weeks that her rate fell below 105 and her cardiac function improved satisfactorily; by then she was becoming nauseated and decreasing the dose maintained her improvement but overcame the toxic effect. Generally speaking, in a patient with atrial fibrillation, cardiac efficiency parallels the heart rate and when the rate is reduced to the normal range the maximum benefit of digitalis has been obtained. Likewise, the effect of digitalis in a given patient is titrated by the heart rate. In comparing different digitalis preparations, it is a standard procedure to test them on patients with atrial fibrillation.

Patients with mitral stenosis often require larger dosage of digitalis than others with cardiac decompensation. An example of such a case was cited by Dimitroff,[3] who was given 1.5 mg. of gitalin daily for six weeks, then 1 mg. and 1.5 mg. alternately, which was the largest dose given to any of his patients mentioned. The patient reported here had some degree of mitral stenosis even after her commissurotomy; there was still a presystolic murmur audible during times of sinus rhythm. It is quite possible, also, that the intractable fibrillation was in part due to scar formation in the atrium resulting from surgery.

A possible reason for the need of as large a dose as was used in this patient was suggested by Miller and Ottenheimer,[5] who reported that an advantage of rectal administration of digitalis is that the drug by-passes the liver via the hemorrhoidal veins and is not trapped in the venous pools of the congested liver. This may well have happened in the present case, as the liver was markedly tense and tender.

It must be remembered that the dose for this patient is an extraordinarily large one and that from 79 to 94 per cent of patients are well maintained on 0.5 mg. of gitalin daily. As with any digitalis preparation, overdosage with gitalin may be dangerous and caution should be used in increasing the dose to fit it to the patient. Batterman, et al.,[1] mention a patient who received 1.5 mg. daily for twenty-one days, developed a partial heart block with idioventricular rhythm and manifestations of a toxic psychosis, and died. No mention was made of nausea occurring. Hejtmancik and Herrmann[6] cite a patient taking 2.0 mg. daily for two weeks who developed runs of multifocal premature beats but no toxic symptoms except weakness.

A further advantage of gitalin is that it apparently is excreted more rapidly than digitalis leaf and digitoxin, but slower than Digoxin and lanatoside C, according to Hejtmancik and Herrmann, who state, "It may be that this excretion is the best one for proper maintenance . . . and that therein lies the apparent superiority of gitalin."[6]

It might be mentioned that a satisfactory means of rapid digitalization with gitalin is to administer an initial dose of 2.5 mg., followed by 0.75 mg. every six hours until the desired therapeutic effect is obtained, the average digitalizing dose being 6 mg.[1] Slow digitalization may be achieved by giving 1.5 mg. daily for three to nine days, averaging 7 mg. total dose.[3] In transferring patients from whole leaf or digitoxin, 0.5 mg. of gitalin usually may be substituted for 0.1 gm. or 0.1 mg., respectively, of the previous medication.

SUMMARY

A case is presented in some detail in which massive maintenance dosage of the digitalis preparation, gitalin, was used. This may serve as a reminder that much larger dosage than the average is required in certain patients. Toxic effects of other digitalis preparations given in equally large doses would preclude their use. In general, gitalin is the digitalis drug of choice, although caution must be used that serious cardiac toxicity does not occur in the absence of the usual warning signs of nausea or other signs of toxicity.

Addendum: Since this article was submitted for publication, the patient's pulse rate increased to 140 and the dose of 3.25 mg. was resumed. The rate temporarily slowed, but then increased to 160, and 3.5 mg. was begun, which has been continued for one week with no resultant slowing as yet; neither has there been nausea nor appreciable digitalis effect electrocardiographically, so the dose will probably be increased further. A few other patients have had the common symptom of overdosage, nausea, on the small dose of 0.5 mg. of gitalin and two have manifested an unusual symptom, visual scotomata, while taking that dose. In general, however, it is my experience that 0.5 mg. is a satisfactory maintenance dose.

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The gitalin used in this case was supplied under the trade name of Gitaligin by White Laboratories, Inc.

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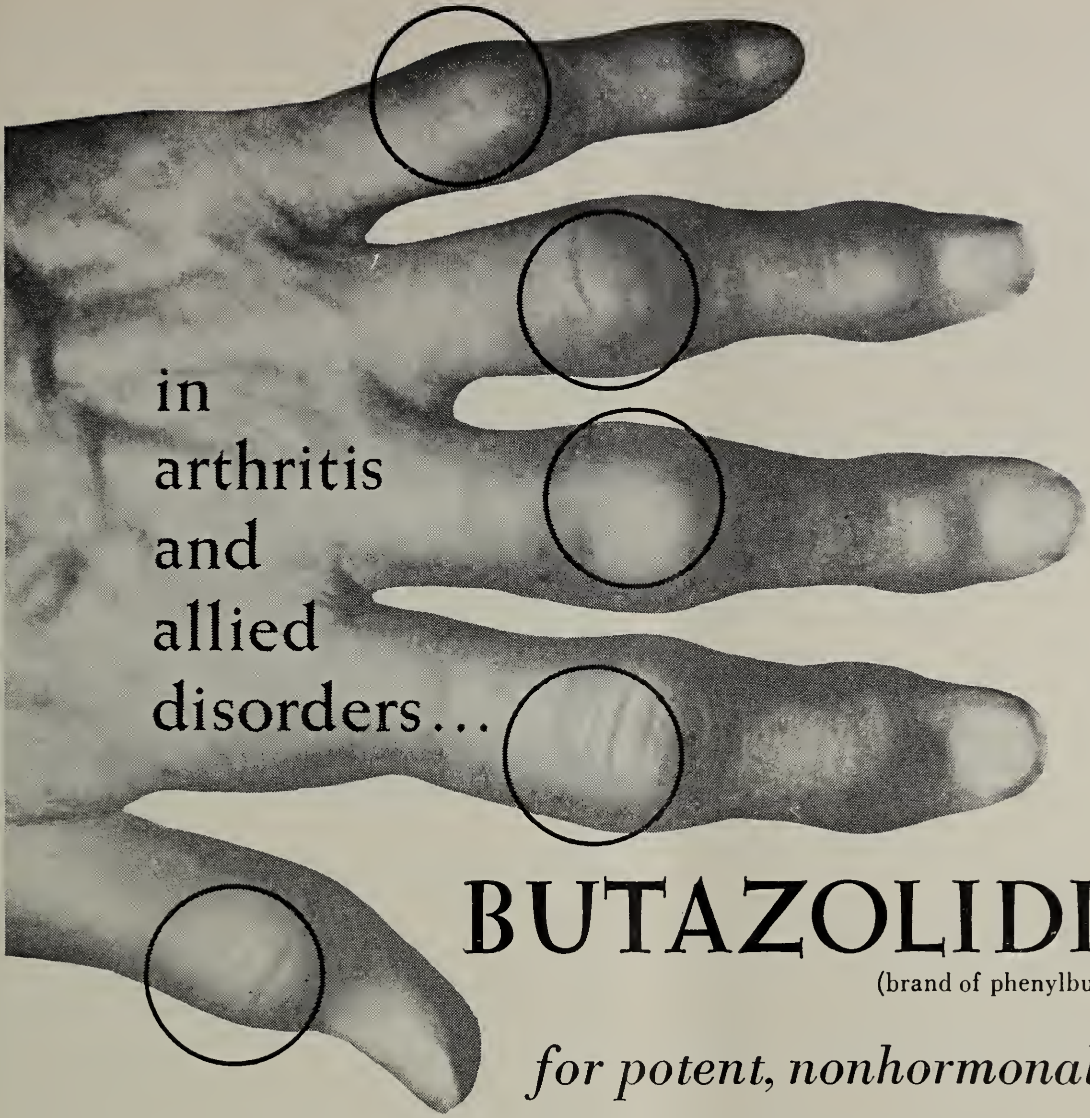

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Surgical Treatment of Tumors of the Eyelids

CHARLES E. LOCKHART, M.D., *Springfield*

TUMORS OF THE EYELIDS, both benign and malignant, are frequently seen in private practice. A great number of these are still small, and may be rather harmless appearing at first glance, but experience shows that postponement or inadequacy of treatment leads to later trouble, often calling for extensive treatment methods, possible disfigurement, and even occasional loss of life from uncontrollable growth extension or metastasis. If small lesions were adequately treated, there would be no large ones. In Missouri, where carcinoma of the skin is the most common form of cancer,[1] many malignant tumors involve the eyelids. The majority of these can be handled safely and surely by scalpel excision.

Primary surgical excision has certain distinct advantages in the treatment of eyelid tumors, whether benign or malignant. It accomplishes complete removal of the tumor in the shortest possible time, with a minimal amount of inconvenience and discomfort, and with a reasonable assurance of an excellent cosmetic and functional result.[2] The surgical approach also has singular merit from a scientific standpoint in that the tissue specimen is not destroyed and is made available for pathologic examination. Microscopic study of the tumor provides not only an accurate diagnosis, but can show also that the lesion has been removed well beyond its borders, by "adequate" excision. This is important to the physician as well as to the patient, who, as a matter of fact, usually requests that the removed tissue be sent to the laboratory and who is interested in knowing exactly for what he has been treated.

Clinical diagnosis, unfortunately, is beset with human error, and even the well-trained eye cannot be nearly so accurate as to dismiss the helping hand of the microscope. Diagnostic difficulties become paramount, especially when one is dealing with ulcerated lesions or those containing pigment. Ulceration may successfully destroy the identity of any lesion, and the presence of pigment moves the growth into a serious and highly dangerous category, a group which will not tolerate inadequate treatment. In many instances an exact pathologic diagnosis may dictate the method or extent of treatment. For example, one would not choose to excise a pyogenic granuloma to the same radical extent as one would a proven carcinoma (fig. 1). Likewise, one would not knowingly elect to treat a pigmented nevus or papilloma with x-ray or radium. In most cases, and especially with the smaller lesions, scalpel excision can provide the pathologic information and the definitive cure simultaneously, without any resulting disfigurement. For more complicated lesions, those requiring extensive treatment either by surgery or irradiation, biopsy is again important. Needless to say, the indiscriminate use of acids, caustics, electric needles or other means of tissue destruction without pathologic diagnosis are not ideal methods of treatment. The idea that a preliminary biopsy is too much trouble is not justified. And while some patients may hold the concept that biopsy might jeopardize the probability of cure, or the cosmetic result, or both, such a concept has no basis in fact. To be sure, biopsy from an eyelid should be done carefully and judiciously, but a sufficiently large specimen can still be obtained without altering the ultimate esthetic appearance. The question of an added expense to the patient does not warrant its omission, since most patients readily agree to its worth-whileness and quite willingly assume the cost of the tissue analysis. Furthermore, the financial barrier in the case of medically indigent patients does not exist in this state, since it is common practice for pathologists in Missouri to examine specimens on a reduced or no charge basis when the referring physician recognizes the patient's circumstances and extends his own services on the same basis.

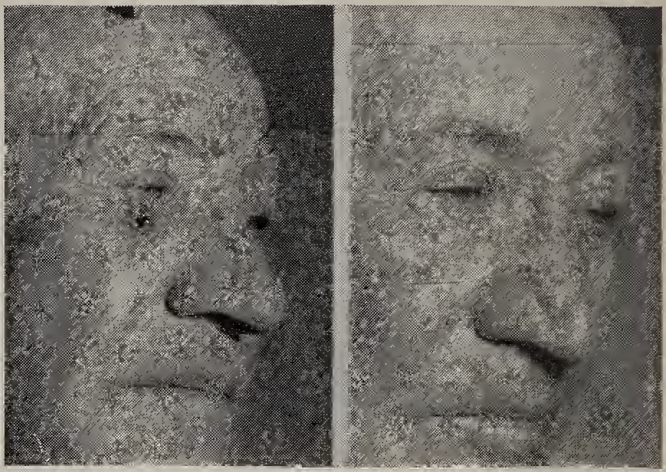

Fig. 1. A. Pyogenic granuloma of lower eyelid, closely resembling basal cell carcinoma. B. Biopsy diagnosis permitted less radical treatment, with time saving, economic, superior cosmetic result.

BENIGN TUMORS

Benign tumors of the eyelids adapt themselves well to surgical procedures under local anesthesia. Most of these tumors are uncomplicated, have well delineated borders and can almost always be excised without altering the appearance or function of the lid. In most instances one's choice would logically rest between excision or some method of immediate destruction, since irradiation generally is not applicable to benign lesions.

Dermoid tumors and *cysts* are fairly common in the subcutaneous structures of the lid, more often the upper lid and eyebrow regions, and lend themselves to primary scalpel removal.

Xanthomata are readily recognized by their yellow deposit-like nature, are usually found on the medial portions of the lids and the naso-orbital regions, and may be excised for cosmetic reasons.

Pigmented nevi are fairly common on the lid margins. As in the case of nevi elsewhere on the body, these must be handled with great respect, and usually are best excised by a small wedge removal in order to insure complete removal of the base. It is not the best policy to treat nevi or pigment containing lesions with cautery destruction.

Benign papillomas appear frequently on the lid margins and some of these may be pigmented. It is important to determine the histologic nature of these growths. If definitely benign, the lesion can be excised with a shallow base, followed by light coagulation of any bleeding points without noticeably altering the contour of the margin of the lid. Similar treatment can be accorded the definitely benign *cutaneous horns* and *filiform warts* on the skin or lid margins. In these procedures it is helpful to trim the lashes in the immediate vicinity of the tumor to facilitate exposure. *Simple granulomas* may develop on the skin or conjunctival aspect of the lid. By excising these flush with the surface level and lightly cauterizing any oozing bed, prompt healing is obtained with imperceptible scarring. *Chalazions* are fairly common and can be removed with scalpel or curette.

Hemangiomas of the port wine type occasionally appear on the eyelids and if not over too large an area can be removed by the multiple excision method or by the use of a skin graft. Many hemangiomata of the "strawberry nevus" type in infants will regress spontaneously. But if treatment seems indicated, the smaller ones can be primarily excised, or one may elect to use definitely attenuated doses of irradiation, purposely light in order not to damage the tissues by the treatment itself. Either the use of x-ray or of radon seeds give good results in these cases.

CANCER OF THE EYELIDS

The majority of the malignant tumors occurring on the eyelids are basal cell carcinomas. While a few of these develop directly on the lid margin, the majority seem to originate on the skin of the eyelid and may spread locally to involve the edge of the lid. Epidermoid carcinomas are much less frequent, and sometimes develop from preexisting keratoses. Other malignant tumors, such as melanoma and lymphosarcoma do occur but are much less common about the eyelids. Thirty-seven consecutive cases of pathologically proven malignant tumors of the eyelids have been treated by scalpel excision in my private practice during the last five years. Of this series thirty were basal cell carcinoma, four were epidermoid, one basosquamous, one malignant melanoma and one lymphosarcoma. It is noted that in only one instance has a local recurrence developed, and this was reexcised fifteen months ago and the patient has had no further evidence of persistence of tumor.

Surgical excision can be used to good advantage in the treatment of these lesions with the expectation of good results, both from the curative and esthetic standpoint. In addition one can avoid the possibility of irradiation damage, such as the latent development of a cataract, skin telangiectasia or atrophy, dilatation of conjunctival vessels, or the keratinization of palpebral, bulbar or corneal epithelium. With the possible exception of the shallow-depth lesions involving almost the entire lid edge, surgical methods compare favorably with those of irradiation or any other method. Naturally, meticulous surgical methods must be employed, and there are several useful points in technic which should be observed. In private practice a large number of these lesions are not only relatively small but have not yet involved the underlying tarsal plate or the free margin of the lid. Thus many of these lesions can be excised and closed primarily without leaving a noticeable scar or deformity. It is notable that quite large lesions can be excised from the upper lid and closed primarily without producing any deformity, especially in older patients. And, although the lower lid has less redundant skin, some can be excised and closed there also without the use of a graft. The patterns of excision must be planned carefully to conform to the natural creases and folds of the lids. When local anesthesia is used, and it is used in the majority of cases, the outline of excision should be indelibly drawn on the skin prior to the injection of the anesthetic drug, since the resulting tumescence of the tissues may tend to obscure previously easily detectable limits of the growth. It is helpful always to have a fine calibered suction tip available to keep the field free of blood during the excision of the tumor. This aid to clear vision coupled with palpation of tissue enables one to distinguish normal from abnormal tissues as the excision progresses and to insure adequate removal. Also, the malignant growth itself is never touched with instruments but is removed intact by means of traction sutures placed in the normal borders of tissue beyond the limits of the growth. Dissection then progresses millimeter by millimeter and the lesion is excised within a complete envelope of surrounding normal tissue.[3] Hemostasis is secured by means of fine plain catgut ties. Primary closure may be facilitated by using fine catgut sutures subcutaneously so that little or no tension is on the final cutaneous silk suture line. It is felt that such a plan of excision is more dependable for complete removal of a growth than methods such as electro-desiccation and curettement for example, a technic which would appear to be somewhat unreliable. During excision attention is paid solely to adequacy of removal without regard for subsequent closure, lest one excise too close to the tumor. If primary closure is not possible without deformity, one can readily resort to a skin graft, or to a sliding or rotating flap to repair the defect (fig. 2). These, too, can be easily procured under local anesthesia, usually at one operation.[4] If such methods are still inadequate, the lid may then be rebuilt by multiple staged lid-splitting procedures, with eventual good appearance and function.[5]

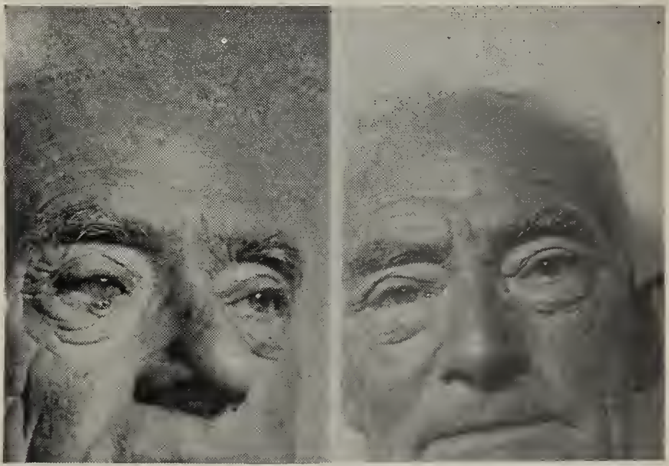

Fig. 2. A. Basal cell carcinoma of lower eyelid, involving margin and extending through complete thickness of eyelid. B. Result after wedge excision and plastic repair at single operation.

THE FULL THICKNESS SKIN GRAFT

When primary closure cannot be effected, the full thickness skin graft is a valuable and useful means of resurfacing an eyelid after removal of a lesion. It has many qualities which make it excel over split thickness skin, so that a split graft is rarely used on the eyelids. It is readily procurable under local anesthesia, being available from an upper eyelid, clavicular or retroauricular area. It can be outlined and obtained in any pattern desired and, although some may have the impression that complete takes are more difficult to obtain than with split grafts, this need not be the case at all if certain particulars of technic are observed. The graft is never pinched or grasped with an instrument. It is removed from its donor bed by placing traction sutures in one border, and is sutured into its new location by multiple interrupted fine silk sutures, close enough together to insure its apposition to the recipient edges at all points of the graft's circumference. Certainly no semblance of fat should be on the under surface of the graft, and it is better if the level of removal is within the connective tissue layer just overlying the subcutaneous fat so that after removal a good layer of connective tissue still hides the fat from view on the donor bed. Of course the recipient area must be made perfectly free of any blood, air bubbles or dead space. The graft should be secured with a pressure stent dressing for best results, with a single layer of vaseline gauze in contact with the graft surface. The graft is usually first dressed on the fifth or sixth postoperative day. To prevent the donor site closure from possibly pulling apart after suture removal and leaving a wide scar, one should approximate the connective tissue bed in progressive "layers" beginning at the central axis and working out to the periphery, using fine chromic catgut, before finally using fine interrupted silk to close the now easily approximated skin edges. The donor site then will heal simultaneously with the graft. Full thickness skin is particularly desirable for eyelids because of its easy pliability, so that it will conform and fold to the natural creases of an opened eyelid (fig. 3). Also there is none of the wrinkling, stiffening, peeling, hardness or contracture which sometimes may develop in a split graft. The full thickness graft is further able to withstand the rigors of climate, motion and all external environmental factors like normal skin and preserves a healthy appearance with satisfactory matching color.

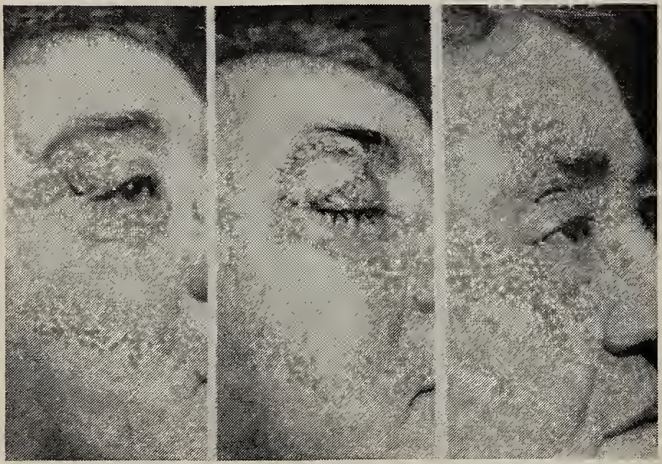

Fig. 3. A. Basal cell carcinoma of upper eyelid extending down to levator palpebris muscle. B. Appearance five days after scalpel excision and full thickness skin graft. C. Result shows pliability of skin graft, conforming naturally to the movements and folds of the eyelid. No recurrence after two years.

Even when excision of a lesion must include the skin up to the actual margin of the lid, the graft can give a satisfactory result by uniting its edge to the presenting conjunctival border at the lid margin. Occasionally a basal cell carcinoma may fan out onto both lids simultaneously from the inner or outer canthus. Here again excellent takes can be expected with grafting both lids, keeping the eyelids sutured together until the graft has taken.

SPECIAL INDICATIONS FOR SCALPEL EXCISION

In addition to routine indications for excision when dealing with carcinoma of the eyelid, one encounters certain situations in which surgical methods are especially indicated and play a practical and important role. There are instances, for example, when the cancer has invaded through all layers of the lid's thickness, including the margin. This, combined with infection and ulceration, leads to destruction and through-and-through loss of tissue of the eyelid. In such a case, treatment of the carcinoma by irradiation or any direct physical agent may successfully destroy the growth but at the same time leave a coloboma-like defect in the outline of the lid. Such a result can be prevented by primary excision of the growth and immediate plastic repair of the lid. In this situation surgical intervention at the outset is less complicated and extensive than when one must operate secondarily upon a previously irradiated or scarred eyelid. Again, there are instances when the carcinoma of the skin, of the lower eyelid particularly, has produced a crablike puckering or contracture of the tissues with a resulting ectropion. It is quite feasible in these cases to excise the growth, release the ectropion and resurface the defect with a full thickness skin graft at one sitting. Another indication for surgical intervention is when the growth has extended through the periorbital soft tissues to involve the supporting structures of the orbit.[6]

When bone has become involved it is difficult for any method short of radical surgery to completely eradicate the cancer. Also, when carcinoma has invaded and obstructed the lacrymal duct system and adnexal tissues one may justifiably excise the involved portion of the duct system in the course of complete removal of the cancer since, as a rule, any tubular structure once infiltrated with cancer will stenose with scar formation when treated by irradiation, and tearing will result in any case. Furthermore, in cases of recurrence of cancer following treatment of any nature, best results usually are obtained by surgical means rather than by retreating with the previously employed method. And, finally, early diagnosis and excision of eyelid tumors while still fairly small, before the lesions become complicated by growth extension, will serve to bring about prompt and comfortable recovery to patients who might otherwise later need more radical methods in order to eradicate their disease.

SUMMARY

Primary scalpel excision has a definite place in the treatment of benign and malignant tumors of the eyelids, and has distinct advantages in many instances. The best methods of treatment of eyelid tumors also make available a tissue specimen for microscopic diagnosis. The overall merits of scalpel excision and certain definite indications for this method are discussed.

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Ophthalmologic Problems in Tuberculous Patients

W. J. MARSHALL, M.D., *Springfield*

It has been my privilege since March, 1949, to be Consulting Ophthalmologist at the Missouri State Tubercular Sanatorium at Mt. Vernon. During this time, I have seen between 1,200 and 1,300 patients at the hospital having some form of ophthalmologic complaint or disturbance. There has been the usual run of refractive disturbances, conjunctival inflammations, old injuries, lid disturbances, infections of glands such as chalaza and sties, old iritis, chronic glaucoma, cataracts, old cases of trachoma, disalignments, dermatitis, pterygia. The conditions in which I am particularly interested for this report are those which I feel are peculiar to tuberculous patients.

HORNER'S SYNDROME

Within the last year there has been one man, 54 years old, who has had a surgical procedure done on his chest as treatment for tuberculosis which brought about a Horner's syndrome. The surgeon stated that the man had had an extraperiostial pack in the upper thoracic region. His postoperative course insofar as this surgery was concerned, was fairly uneventful as the man was dismissed from the hospital in a period of several weeks' time. Shortly after operation there developed the picture of a slight ptosis of the right upper eyelid, a slightly smaller pupil and a slight recession of the eye on that side. To most ophthalmologists this picture is one which is familiar. To the doctor who is not as familiar with it, a word of explanation might be in order. Most of the nerves which have functions about the eye are cranial nerves. The ones which control the movements of the eye, or the extraocular muscles, are supplied by cranial nerves III, IV and VI. C. VII is the nerve supplying the facial muscles and is responsible for the closing mechanism of the eye (orbicularis oculi). C. V is the sensory nerve to the face. The ophthalmic division of it supplies a sensory nerve to the eye and forehead. A sympathetic chain follows up from the thoracic region along the carotid artery and branches out along the ophthalmic artery and ciliary ganglion, supplying the dilator muscles of the pupil. Injury or damage along this sympathetic chain then will damage its dilating affect on the pupil. The constricting muscle of the pupil then will pull the pupil down smaller. A few fibers from this chain supply the muscle of Muller which helps in the elevating action of the upper eyelid, hence the slight ptosis. Therefore, a Horner's syndrome developing as a result of a chest operation on a tuberculous patient does become of some clinical interest and reminds one again of some of the anatomy which seems quite remote and yet does affect the eye, in its appearance at least.

PROLIFERATIVE RETINOPATHY

There have been several tuberculous patients in whom I feel that the tuberculosis has played some part in the development of this condition. Although common to ophthalmologists, it is probably a little unusual for other doctors to be acquainted with the fact that a proliferative reorganization of hemorrhage sometimes occurs in the retina. Thus, it is seen sometimes when there have been massive hemorrhages in the inner retinal layers or in the vitreous. In the process of reorganization, vascularization and scar tissue is laid down. As a result of this scar tissue, contractures are formed and elevated bands will show up in the retina. These have the appearance of the scar contractures which occur in surface burns. Of course these are much smaller inasmuch as they occur in the retina. As an example, one young man about 26 years old was a diabetic as well as a tuberculous patient. This man developed a severe hemorrhagic retinopathy reorganizing into contraction bands about the macular area. At one time, about a year ago, this patient's visual acuity was down to hand motion in his better eye and barely light perception in the other. Hemorrhages were so extensive that it was impossible to make out any details in either fundus. There was a black reflex from both fundi on a fundus examination. As this process improved one could see the elevated bands which followed out roughly the course of the superior and inferior temporal blood vessels from the disk forming a rather circular elevation or contraction band in both fundi. As the active processes of his retinitis (if one may use that term) subsided, the scar tissue remained as a permanent defect. Upon my suggestion Rutin and Lipotriad were given to this patient. He has shown much improvement in the course of time and has now a visual acuity of 20/100 in his right eye and counting fingers at 2 feet in the left. It is remarkable that this patient, in spite of all his difficulties, has a good frame of mind. In spite of the fact that his relatives have been rather discouraged as to his future outlook, he still has a rather hopeful attitude. His mother has been desirous of him learning to read Braille. The patient himself feels that his vision will improve enough that Braille would have no practical value to him. We have had other cases of diabetic retinopathies in tuberculous patients, many of whom have developed proliferative changes in the reorganization of the hemorrhages which have occurred in the retina. I personally feel that a proliferative retinopathy is more common in tuberculous patients than in other patients with retinopathies.

TUBERCULOUS MENINGITIS

This is probably one of the largest and one of the most interesting groups that I have had occasion to see. The neurologist and ophthalmologist are well aware of the significance of papilledema present in cases of increased intracranial pressure. There are many theories as to the origin and nature of the papilledema. However, I feel that most physicians are agreed upon the point that it is frequently seen in cases of acute onset of increased intracrainal pressure. Regardless of the theories as to the mechanism of its formation, the indicated relationship is of most importance clinically. There have been about twenty-five or thirty tuberculous meningitis patients at the sanitorium during the last five years. A large percentage of these were younger individuals, and they in particular are the ones who usually showed the more acute nature to their meningitis. I have the feeling that the involvement of the meninges is one of miliary origin. During the acute meningismus state, when the patient is running a high fever, comotose and rigid, papilledema is almost universally present. Some of these patients during this stage may show an involvement of one or more of the extra-ocular nerves. Streptomycin and a more active specific treatment has effected more recoveries among these patients than previously. In the past tuberculous meningitis was considered as being almost 100 per cent fatal; however, more recently many of these patients survive and come out of the illness with new complications of the involvement. Several of these children developed an optic atrophy following the papilledema. It is to be borne in mind that papilledema alone should not give rise to much damage to the optic nerve. So the question arose as to the mechanism of the optic atrophy. It is my opinion that the extension of the meningitis in the optic nerve sheath has extended directly through the pia into the nerve itself and caused a permenant damage of the optic nerve fibers. I would estimate that this condition was found in about fifteen or twenty per cent of the youngsters who had tuberculous meningitis and survived.

TUBERCULOUS UVEITIS

Most textbooks in ophthalmology describe the inflammations involving the iris, ciliary body and the choroid as many times being tuberculous. They are not too conclusive as to whether or not it is a direct result of the tubercle bacillus involving the vascular layers of the eye. I have been impressed by the fact that few active uveitis cases have been seen among the patients at the sanatorium. The so-called tuberculous uveitis which is commonly described, I feel is more of a tuberculous (using the adjective meaning of the word rather than an etiologic meaning). Histopathologically, the process appears as a tubercular lesion with casation round cell infiltration. For some reason or other, these cases are conspicuous by their absence in the tuberculous patients at the sanatorium.

HISTOPLASMOSIS

During the recent year there have been about ten patients who have been diagnosed as having histoplasmosis. This fungus-like infection of the lungs is becoming better diagnosed. To me the question arises as to whether or not there is any eye condition peculiar to this group of patients. I have examined most of them on the slit lamp and have found no pathologic process in the anterior segment of the eye with the exception of one patient. This patient was an elderly woman of about 65 years of age. She gave the picture of a marked irregular astigmatism of the cornea with vascularization and some scar tissue in the deeper corneal layers. She gave the story of having had an inflammatory process in her eyes as a child and having "weak eyes" ever since. Histoplasmosis was a recent diagnosis of her chest. The question arose in Dr. Brasher's and my mind as to whether this woman might not have had histoplasmosis as a child with some corneal involvement and to have reached a stage of inactivity, to be reactivated later in life. We are quite satisfied that there is no reason to suspect congenital syphilis in her, although the appearance is that of an old case of interstitial keratitis. If we would accept the interstitial keratitis as not being due to syphilis, then we would have to suspect it being due to a tuberculous process or some other illness during childhood. I personally feel that the corneal deformity which she has is a direct result of some inflammatory process of her childhood in her cornea. Since both tuberculosis and histoplasmosis give rise to scar tissue formation, we feel a new question arises in this patient. We have offered the suggestion that histoplasmosis may simulate some of the manifestations of chronic tuberculosis.

This has been an unorganized presentation but interesting to me in summarizing the types of eye problems peculiar to tuberculous patients. The following conclusions seem evident:

1. Tuberculous patients have the usual eye complaints and problems of nontuberculous patients.
2. Proliferative retinopathy is more severe in them when present.
3. Optic atrophy is a complication in tuberculous meningitis patients.
4. Tuberculous uveitis is not common to tubercular institutional patients.
5. Histoplasmosis is presenting some new problems.
6. Horner's syndrome is a complication possible in some of the surgery on a tuberculous patient.

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GP's Still First

. . . The four biggest groups of cases seeking medical attention are chest ailments, baby care and immunization, accidents, and neurotic complaints. For most of these the help of the general practitioner is the main requirement.—Roscoe L. Pullen, M.D., Address to the Missouri Academy of General Practice, *The Kansas City Star.*

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Wilm's Tumor

WALTER S. SEWELL, M.D., AND EDWIN M. POWELL, M.D., *Springfield*

THE PURPOSE OF this report is to add to the literature two cases of Wilm's tumor with a seven year survival. Garrett and Mertz stated that the expectant cure rate in Wilm's tumor has increased from 10 to 33 per cent in the last fifteen years. While this survival percentage is high, the potential is possible due to the more frequent examinations of patients in this age group.

In a cursory review of the literature an excellent statistical study of all reported cases of Wilm's tumors up to 1949 by Harvey[1] showed a 17 per cent five year survival rate of 716 cases and a 21.9 per cent survival of 444 treated cases. More recent studies by Garrett and Mertz[2] presented twenty-three cases with eight cases surviving an average of 6½ years, or a 34 per cent survival. Goddard[3] in a series of thirty-seven patients had eight survivors; 14 per cent five year survival and 28 per cent probable survivors. Hazzard, Melecow and Seidel[4] presented twenty cases with 14 per cent five year survival, and Sauer[5] presented ten cases with 14 per cent five year survival. These survival rates compare favorably with the results published by Deming[6] with a 9 per cent five year survival of all renal tumors in his series. Barrett and McCague[7] presented a 19.6 per cent five year survival in 199 cases of renal tumors. Ackerman and Regato[8] classify five year survival in Wilm's tumor 10 to 15 per cent, and five year survival in adenocarcinoma of the kidney at 15 to 25 per cent.

PATHOLOGY

Although the origin has been the source of much discussion, most authors agree that Wilm's tumors arise from a cell rest, capable of producing ectodermal and mesodermal elements but no endodermal elements. They may contain smooth muscle, connective tissue, bone, cartilage, striated muscle, adenomatous areas and, occasionally, glomeruli.

DIAGNOSIS

Tumor generally is the predominant finding; hematuria or pain may be the initial or more prominent symptom, but this is less common. The significance of the mass is generally established by intravenous pyelogram and, though many authors state this is indication enough, we feel that all these patients should have had a definitive urologic study prior to surgery, obstructive causes of renal deformity having been ruled out.

TREATMENT

Treatment consists of surgery, radiotherapy or a combination of both. Controversy in the literature generally arises from the decision to utilize preoperative or postoperative radiotherapy or surgery alone. While a few cases of ten year survival have been reported with the use of radiotherapy alone, the number is small. Harvey's series of 444 cases showed a significant difference in those patients treated by surgery and postoperative radiation. We subscribe to this attitude and advocate preoperative radiation only for those cases in which the size of the tumor might influence the surgery. Although neither of these cases submitted to postoperative radiation, we still feel it is advisable.

Case 1. D. D., 22 month old female, one week prior to admission to hospital on June 9, 1947, had fallen down and complained of hurting her back. Mother at that time noted blood in the urine. The family physician was consulted and he discovered a mass in the right upper abdomen and flank. He advised that this was probably a renal tumor. The patient was sent to Springfield with this diagnosis. Examination on admission showed a large tumor mass occupying the right upper quadrant. Urinalysis: Albumin 1+, sugar negative, 1+ red blood cells. Blood count: Red blood count 4,000,000, white blood count 4,800, hemoglobin 45 per cent. Kidney, ureter, bladder examination revealed rather large tumor mass in the region of the right kidney. Patient was given 800 roentgens to to the front and back of the right kidney area over a one week period. The tumor responded rapidly to treatment, decreasing markedly in size, and on June 11, 1947, a lumbar nephrectomy was done. The patient made an uneventful recovery. The wound healed nicely, and the patient left the hospital on the fifth postoperative day. No x-ray therapy was given due to the parents' failure to return the child for treatments. She has continued to do well, with normal gain in weight, size and ability, and with no evidence of adverse effects from the radiation therapy.

Pathologic Report: Specimen, right kidney.

Gross description: The renal mass measures 9 by 5 by 4.5 cm. with an attached 5 cm. length of ureter. It is somewhat lobulated and the reniform shape is lost. Sectioning reveals a third of the specimen to be occupied by a rounded nonencapsulated soft yellowish tumor occupying the middle portion of the organ. This tumor measures 4.5 cm. in greatest diameter. The tumor lies directly beneath the pelvic mucosa and distorts this space. The balance of the renal parenchyma is not remarkable.

Histologic examination: Sections taken from the cortical portion near the zone of transition reveal the glomeruli of the cortex to be normal in appearance. There is a fusion of normal into abnormal neoplastic tissue blending subtly and causing a loss of normal architecture. The tumor tissue is composed of epithelial structures showing a diversity of shape. In some regions the epithelial cells assume the form of preglomerular structures while in other areas tubules of varying sizes and shapes are present. Interspersed between the epithelial components there are mesenchymal derivatives in the form of sheets and bundles of spindle shaped cells with identical shaped nuclei. This tissue is of the loose embryonic type and is characteristic of this tumor. Mitotic activity is minimal and there is no blood vessel invasion (figs. 1 and 2).

Pathologic anatomic diagnosis: Wilm's tumor or the nephroblastoma of Willis.

Case 2. M. S., 5½ year old white female. Six weeks prior to admission to hospital the mother noticed that the child's urine was bloody, which she attributed to an injury. The child had been completely normal until about that time when the mother noted loss of energy and appetite, no specific complaint of pain, fever or bladder symptoms. Past History: Usual childhood diseases without complications.

Physical Examination: Normal except for a large tumor mass in the right upper quadrant about the size of a small grapefruit, without tenderness. Laboratory findings: Hemoglobin 51 per cent, red blood count, 2,870,000, white blood count 3,700, and the urine was grossly bloody with 2+ albumin. Cystoscopy: Bladder entirely normal. No filling defects or ulcerations. Right ureteral orifice appeared patulous, left was normal. Catheter passed easily to pelvis of each kidney, and bloody urine was obtained from the right. Pyelograms showed normal left kidney and a large tumor mass of the right kidney, with collecting system deformity characteristic of a carcinoma. Patient was given radiotherapy from October 20 to November 1, 1947, during which the mass showed marked decrease in size. On November 7, 1947, a right nephrectomy was performed through a flank incision. No glands were palpated. As much perinephric fat as possible was removed. Postoperative course was uneventful. Wound healed by first intention. Sutures were removed at seven days. She was seen on December 2, 1947, at which time her hemoglobin was 56 per cent, red blood count 4,040,000. She had gained some weight and was feeling much better. At that time she was advised to have further radiation therapy which was ignored. Communication with the family on June 23, 1954, revealed that the child was well, normal in weight and ability. Her only complaint was an occasional headache which cleared with aspirin.

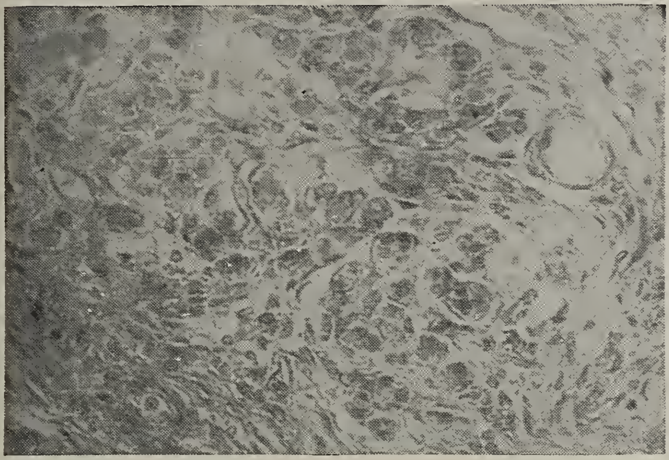

Fig. 1. Case D. D. Numerous epithelial structures are interspersed with embryonic stroma. (Times 100.)

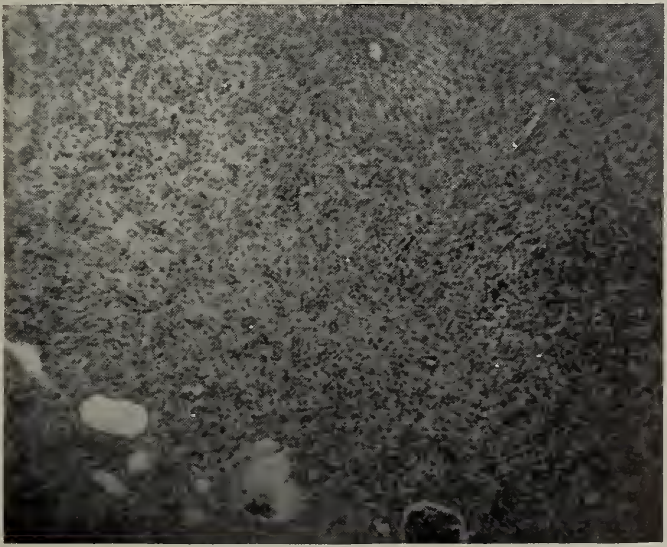

Fig. 2. Case D. D. Preglomerular tuft-like structures as well as some abortive tubules are noted. (Times 100.)

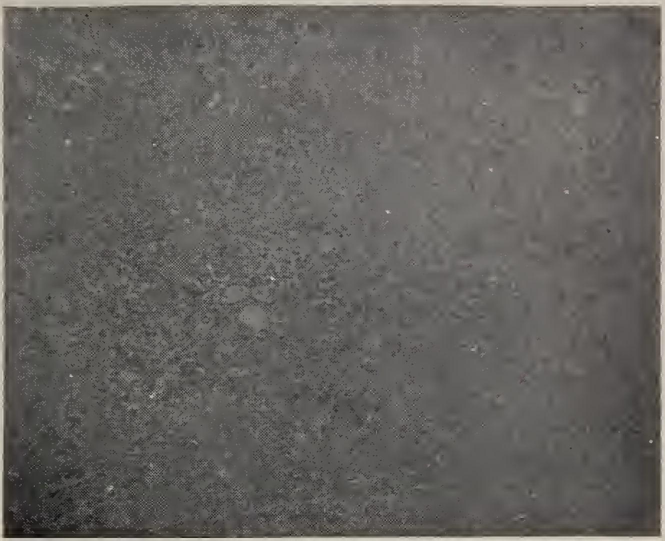

Fig. 3. Case M. S. Loose embryonic tumor tissue dominates with some epithelial components noted. (Times 100.)

Pathological Report: Specimen, right kidney.

Gross description: The right kidney measures 9 by 5 by 4 cm. with 5 cm. of ureter attached. The surface is smooth and the outline is symmetrical. Sectioning of the kidney reveals the presence of a mass at the upper pole measuring 2 by 4 by 3 cm. It is yellowish and hemorrhagic and invades and compresses the calices and pelvis. The mass is surrounded by a thick circumscribed fibrous tissue capsule. Below the mass and occupying an irregular area of the parenchyma the tissue has a brown hue. This area extends 3 cm. in diameter. Throughout the entire cut surface of the tissue there are irregularly scattered white opaque flecks and spots resembling somewhat miliary abscesses. The normal gross markings of the kidney are almost indistinguishable and are lost in a pale fibrous tissue.

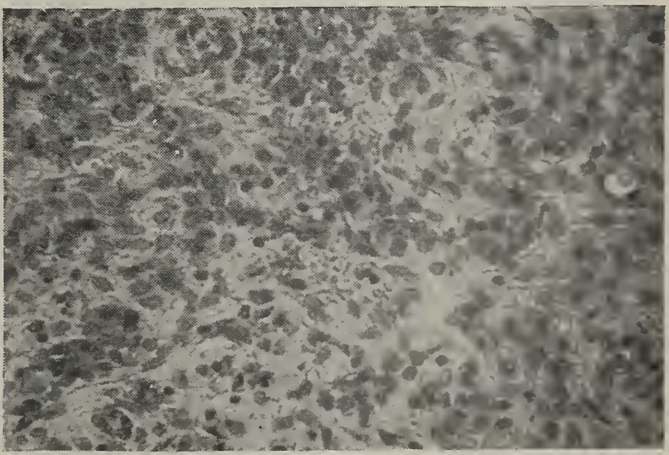

Fig. 4. Case M. S. Spindle shaped cells show pleomorphism and attempts at tubule formation are seen. (Times 100.)

Histologic examination: There is a fusion of the normal renal cortex into neoplastic tissue. In this tumor there is a preponderance of the mesenchymal embryonic component with large areas of production of loose tissue. The predominating cell is the spindle type with elongated fusiform and spindle shaped nuclei and cytoplasm. Active cellular growth is at a minimum. Intermingled with this mesenchymal tissue are epithelial structures of the tubular variety and an occasional glomerular-like body is also seen (figs. 3 and 4).

Pathologic anatomic diagnosis: Wilm's tumor of right kidney.

DISCUSSION

In spite of the dire prognosis inferred by authorities in cases with hematuria, both of these children have survived seven years after operation. Again neither child was returned for postoperative radiotherapy. Although these are only two cases out of a probable 500 surviving this disease and nothing can be inferred from the type of treatment they received, one issue is constant. Both children received complete examinations by their family physicians and were urged to have immediate study to determine the nature of their findings. Hematuria or a tumor mass is cancer until proven otherwise.

CONCLUSION

Two cases of Wilm's tumor with a seven year survival have been presented with a brief review of the literature.

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Tularemia in Southwest Missouri

A Report and Discussion of Seventy-Eight Cases

GUY D. CALLAWAY, M.D.; STANLEY S. PETERSON, M.D., AND JAMES T. GOOD, M.D., *Springfield*

TULAREMIA USUALLY has been considered a rather rare, though important, infectious disease. As such, according to "The Missouri Public Health Manual for the Control of Communicable and Other Diseases Dangerous to Public Health,"[1] each case is to be reported individually to the proper authorities. Yet in Greene County in the years of 1947 through 1951, no cases were reported, and in the State of Missouri the reported cases of tularemia were as follows: 1947, 87; 1948, 72; 1949, 81; 1950, 52; 1951, 34. These include all of the positive agglutinations, whether new cases or old, as well as proven cases.

Since 1947, only one article on tularemia is listed in the index of the JOURNAL OF THE MISSOURI MEDICAL ASSOCIATION, and that an excellent case report by J. A. Ossman and E. R. Bohrer,[2] of Jefferson City, who at that time were calling to the readers' attention the increasing incidence of tularemia in rural Missouri and the remarkable response of the disease to Streptomycin.

Tularemia is a specific infectious disease caused by bacterium tularense. It is not known how long tularemia has been present in Missouri, but it first began to be recognized in the middle or late 1920's, which was within fifteen years of its being recognized as a disease entity by McCoy and Chapin. Some of the older physicians in our area have told of a disease which was called "tick fever" that occurred occasionally in the rural communities which they have stated is the same disease clinically and which is now recognized as tularemia. One of us knows a physician who in 1914 had an infection on a finger with axillary lymphadenitis and fever, that came on after hunting and handling rabbits. After tularemia began to be recognized in the state, he recalled his illness and suspected that he had had the disease. He had agglutination tests made and found that he had a positive blood test, though it had been about twenty years since the illness.

The earlier cases that were recognized in this region were of the ulcero-glandular and oculo-glandular types. These people became infected from handling wild rabbits. A little later it was found that dressing quail, squirrels and ground hogs could be the source of infection, and that the bite or scratch of an animal that had been feeding on the carcass of an infected animal could also initiate the disease process in man. It was not long after this that we began to recognize an ulcero-glandular type due to tick bites and that a few of these cases developed an "atypical pneumonia" which could be shown by x-ray, but which often could not be found on physical examination. These patients would be quite ill for several weeks and, not infrequently, an elderly person would die. Many of those who survived would have suppurating glands that would open spontaneously if not incised and by the time the glands were healed the patient would be well on the road to recovery.

We would like to present a summary of some seventy-eight cases of tularemia which have been admitted to a small general hospital in Southwestern Missouri during the years of 1947 to 1951 inclusive (see table). These are all proven cases making necessary the removal of many "probably cases" from the list because of patients leaving the hospital as improved before agglutinations became positive even though the history and clinical course were typical of the disease.

For the sake of conformity with accepted nomenclature we are reporting our cases according to the usual classification. There was only one case of ocular-glandular tularemia out of seventy-eight total cases.

A boy of 11 years had been picking ticks off a cow when she switched him in the face with her tail. Six days later he was admitted to the hospital with a severe swelling of the right peri-orbital tissues and

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From the Medical Section of the Smith-Glynn-Callaway Clinic, Springfield.

TABLE 1.

DISTRIBUTION AND SOURCE OF TULAREMIA BY YEAR AND TYPE

		Ulcero-Glandular			
YEAR	OCULO GLANDULAR	WITH PNEUMONIA	WITHOUT PNEUMONIA	TYPHOID	TOTAL
1947	1 Tick	10 Tick 9 Rabbit 1	9 Cat Scratch 1 Tick 8	17 Died 1 Squirrel 1 Rabbit 4 Tick 12	37
1948	0	3 Quail } Rabbit } 1 Tick 2	13 Tick 9 Rabbit } Quail } 1 Recurrence 3	5 Tick 3 Squirrel } Tick } 1 Rabbit } Tick } 1	21
1949	0	2 Tick	2 Tick	3 Squirrel Tick	7
1950	0	2 Tick 1 Tick 1 Quail	4 Tick	2 Tick	8
1951	0	1 Tick	3 Tick 2 Cat Bite 1	1 Tick	5
Total	1	18	31	28	78

a real inflammation of the eyeball itself. There was a rather large swelling of the glands of his neck on the same side. His temperature was 104.4 F. He was started on Streptomycin in view of the history and findings. In forty-eight hours he was fever free. He was discharged from the hospital on the eleventh day of his illness and on the twenty-first day after admission his agglutinations, which were negative for tularemia on admission, had reached 1-1280 and the patient was feeling quite well.

The second classification is that of ulcero-glandular tularemia which may or may not be complicated by pneumonia of varying degrees. A typical case follows:

Male, aged 74, removed a tick from the right shoulder region on June 11, 1947. Three days later an ulcer had formed and he began having chills, fever, sweats and aching. He had daily chills for thirteen days, his temperature rose to 104 F. daily, and he became delirious and unmanageable after four days and could not be kept in bed. He developed a severe pleurisy-like pain with cough about ten days after the onset. He was brought into the hospital on the thirteenth day of the illness and was stuporous, irrational at times, dehydrated and coughing in paroxysms at intervals. There was an indolent-like ulcer three fourths inch in diameter at the lower angle of the right scapula, a gland measured about two inches in diameter in the right axilla. Coarse, moist rales could be heard throughout each lung, but more on the right. There was diminished resonance on the right from mid-interscapular space to the base with diminished breath sounds.

X-ray showed a moderately dense area of infiltration in the lower half of the right lung field and a denser shadow at the left costophrenic angle as from a pleurisy with effusion. Blood counts, urinalysis and agglutination tests were not revealing. His temperature was 102.4 F., pulse 84, respiration 20, but he was much sicker than these would indicate. History, symptoms and physical findings were so typical of tularemia that Streptomycin was started even though the agglutination test was negative. There was little change in his condition in the first twenty-four hours, but by thirty-six hours after Streptomycin was started he was rational, his temperature was normal and he had an improved appearance in every way. He remained in the hospital sixteen days, and at no time thereafter was his temperature above 99 F.

The pulmonary infiltration was rather slow in clearing up, but the pain in the chest and the cough did not bother him after the fever subsided. The gland in the axilla was never painful. There was but little change in its size at the time of discharge. The ulcer was healing satisfactorily. There was nothing spectacular in the way the lesions changed in this man, but it was dramatic in his general well-feeling and quick response from an almost critical condition to rapid recovery.

The agglutination test for tularemia was still negative on July 2, which was twenty-one days after the onset, but became positive in 1-640 dilution on July 10.

The third type, typhoid tularemia, in our cases has consisted of almost pure pneumonic processes. Out of seventy-eight cases twenty-eight, or 35.9 per cent, were in this classification. An example of this group follows.

A 57 year old farmer entered the hospital August 24 after having been ill two and a half weeks with fever, backache, leg ache, profuse sweats, pain in the right chest and coughing with mucoid expectoration. He had been given a sulfonamide at home. He had some abdominal cramps and vomited several times but he thought these were due to the medicine. The only significant physical findings were rales in the right chest, posteriorly, and impaired resonance and diminished breath sounds in the region of the right lower lobe. His white blood count was 15,750. Agglutination tests were negative except positive for tularemia 1 to 1280. Blood cultures and Kahn were negative. He gave a history of having handled wild rabbits, but no skin lesions nor enlarged lymph glands were present. X-ray of the chest showed an "atypical pneumonia" involving the region from the right hilus to the base of the lung.

Streptomycin was given on August 31, 1947 (twenty-third day of his illness). Improvement was definite in the thirty-six to forty-eight hour interval. He was more alert, the cough was subsiding, pain decreased, appetite improved and sweating stopped. Marked improvement was evident by the time the course of Streptomycin had been completed. Improvement in the pulmonary findings was definite also. Three days after Streptomycin was used he was allowed to leave the hospital and was able to be up and take care of himself.

The patient that died was a 50 year old farmer who had the "pneumonic" form of the disease. He was started on Streptomycin six days after the onset of the disease early in 1947. He developed a pneumonia and later a meningitis followed by a bloody pleural effusion and lung abscesses. One abscess was in the upper lobe of the right lung and one in the lower intramus and intrathecally. He was given Streptomycin intrapleurally and had a total of 24.5 grams of Streptomycin in two and a half weeks. No good explanation for his not responding has been available but it has been thought that the thick walled abscess cavities were not penetrated by the Streptomycin and served as a source of continued infection.

Until May of 1948, only six fatal cases of purulent tularemic meningitis were to be found in the American literature.[3, 4, 5, 6, 7, 8] Pullen and Stuart[9] had observed a ten year old boy with tularemic meningitis who had recovered. Glass[10] reported twenty-eight cases which recovered, but all of these occurred in the ulcero-glandular type. They were young, healthy males adequately treated with Streptomycin.

With the advent of Streptomycin the treatment of tularemia has undergone a great change. Previous to 1931, the disease was seldom recognized and no specific treatment was available. Starting about then a series of treatments with selected agents were studied periodically, first, an immune serum prepared from horses and goats, then hyperimmune serum from the same animals; then the chemotherapeutic agents and antibiotics and, finally, in 1945-46, Streptomycin.

Foshay,[11] in August 1946, reported the effectiveness of Streptomycin in comparison to other agents available at that time and properly predicted that, "Streptomycin would be the treatment of choice for tularemia." With the advent of Streptomycin the treatment of tularemia has changed the disease from a prolonged severe illness to be treated over a long period of time in the hospital to a disease which is treated at home and, frequently, the symptoms are eradicated before the diagnosis is made. And the trend has been even further strengthened by the use of oral antibiotics which are now proven to be efficacious in the disease.

We have found, however, that the patients who come to the hospital for treatment of tularemia at the present time have usually had a course of treatment with one of the other antibiotics and, in our hands, a course of adequate doses of Streptomycin has resulted in no recurrences of the disease since 1948, and for this reason we tend to favor this drug. To this point it is interesting to note that Foshay[12] in his "Method of Treatment for Tularemia" in "Saunder's Current Therapy for 1954," lists Streptomycin first.

Our method of treatment is now quite standard. One gram is given on making or strongly suspecting the diagnosis and one half gram daily until a total of three and one half grams have been given over a period of six days. On this schedule we have virtually no reactions, tinnitus, nor vertigo, and only three recurrences. These all occurred in the year 1948 in a relatively short space of time.

DISCUSSION

In the year 1947, the first year Streptomycin was generally available but used only in hospitals, the proven cases of tularemia equaled almost exactly 1 per cent of the hospital admissions. It is only reasonable to suppose that the other hospitals admitting people from the same area would have about the same admission rate. This in itself then constituted a real health problem for the rural population in Missouri. These patients were predominantly rural people exposed to ticks. In fifty-three of the seventy-eight cases (69 per cent) ticks alone were responsible, and in three more (4.9 per cent) they could not be ruled out. As more and more people spend time in these areas and yearly vacationers are increasing, the problem becomes not a local one, but a problem of city health as well.

As we see patients who are extremely ill and who have usually had some treatment for several days before entering the hospital (often with a drug which should produce a cure) it becomes apparent that adequate treatment is just as important in tularemia as in any other disease. Certainly if one of the oral antibiotics such as Aureomycin, Chloramphenicol (Chloromycetin), Terramycin (all of which are effective) are used, then the patient must be cautioned to take all of his medicine and a total of from ten to twelve grams of the medication given.

Our observation leads us to agree with Francis,[13] Pullen and Stuart,[9] and Kavanaugh[14] that there is "stupor, meningismus and other signs of possible central nervous system involvement" associated with tularemia even though it is not stressed in any of the classical descriptions of the disease. Many of our patients were prostrate and comatose with signs of meningismus and even though lumbar puncture was done and purulent spinal fluid found in only one patient, still the wonderful improvement in the mental outlook after the institution of Streptomycin satisfies us that the central nervous system is affected to a great degree. Stupor, headache, listlessness and even resistance clear before the temperature subsides.

Certainly this is becoming a problem of the physician who treats the patient at home, and this is as it should be. Hospital admissions for tularemia receded from 1 per cent in 1947 to a little more than 0.1 per cent in 1951, while total hospital admissions were increasing. We believe that this disease is now usually curable at home and should be so treated under ordinary circumstances. Certainly it is being cured now before it is even proven, and this too is as it should be.

In all of the seventy-eight cases we had no chronic tularemia. In all of our cases who stayed long enough to check agglutinations, or who reported back, an appreciable titer was established in two to four weeks' time, usually less. This was occasionally complicated by positive cross agglutinations for Brucella Abortus and more infrequently with the typhoid-paratyphoid group. These cross agglutinations receded while agglutinations for tularemia increased, on occasions, for several months.

CONCLUSIONS

1. Tularemia has become relatively easy to treat since the advent of Streptomycin.
2. It is generally more wide spread than it is given credit for being and should be thought of at the onset of any severe infectious process, and treated if there is a suspicious clinical picture.
3. It should be cured before it is absolutely diagnosed. Agglutinations may take up to four weeks to show positive.
4. Pneumonia was an important finding in our patients. Some of the "atypical pneumonias" could be positively identified if tularemia is remembered as a possibility.
5. Tularemia will be more of a problem of the nonrural districts as vacations "in the hills" continue to increase in popularity—and possibly a whole new reservoir of city rodents and pets will be opened up which will be as important as ticks and rabbits are.
6. Ticks were most often the source of infections in our patients and rabbits least. Two cases involving cats were included.
7. Adequate medication with any of the effective drugs results in cures, but patients must be cautioned to take all the drug which is prescribed.

500 Holland Bldg.

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Diagnosis and Treatment of Minor Eye Injuries

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THE GENERAL practitioner is frequently the first if not the only one to be called upon for treatment of a multitude of minor eye injuries, and it behooves him to refamiliarize himself from time to time with accepted and proven standards of first aid to the injured eye.

A detailed history of the mechanism and physical or chemical forces, which led to the injury, followed by accurate localization and diagnosis, cannot fail to show the way to instituting the logical treatment.

Eye injuries of a minor nature occur everywhere, at home and at work, outdoors and indoors, to grown-ups and children, to the farmer as well as to the welder, carpenter or automobile mechanic, and no matter how insignificant the injury may appear it should be handled by someone with experience and with respect for the delicate tissues of the eye, rather than by a well-meaning member of the patient's family or a too helpful neighbor. It is the purpose of this paper to outline briefly the procedures which have proven most efficacious in the treatment of everyday eye injuries and which, in most instances, can be accomplished with a minimum of equipment.

Three prerequisites are indispensable for the correct removal of a foreign body embedded in the cornea: sufficient illumination with a concentrated beam of light; a binocular loupe for magnification, worn by the operator, and, last but not least, good eyesight of the physician himself, with a well developed sense of depth perception. Without these, any attempt at removal of the foreign body is likely to be doomed to failure and it would be wiser to send the patient on to a colleague who can fulfill these requirements.

It need hardly be emphasized that the best time for taking care of the injured eye is as promptly as possible, as any undue delay will invite secondary infection or other unnecessary and avoidable complications such as corneal ulcers or additional traumatizing of tissue and damage to deeper structures of the eye, besides causing needless discomfort and absenteeism.

Small particles of a foreign substance are usually found adherent to the upper palpebral conjunctiva or, more often, embedded in the corneal epithelium. The patient's statement that "the cinder is under the upper lid" is frequently misleading because the sensation of the foreign body embedded in the cornea is referred to the upper lid, due to its rubbing over the eyeball during winking.

If the patient states that his eye feels less uncomfortable when held wide open, the particle is, in all probability, on the cornea. Eversion of the upper lid will readily disclose the foreign body if attached to the upper tarsal conjunctiva. A single light brushing motion with a moistened applicator will easily dislodge the object. No surface anesthesia is required.

In the majority of cases, however, the foreign particle, usually a solitary one, is more or less deeply embedded in the cornea, and this presents a somewhat more difficult situation. Depending on the color of the foreign body and its location on the cornea, it may not be easy to visualize, and the instillation of one drop of a 2 per cent solution of Fluorescein, followed by irrigation with normal saline solution after several seconds, will be of great help, as any foreign substance as well as any defect in the epithelium will show up with a bright green stain. Fine slivers of glass, either on the cornea or on the bulbar or tarsal conjunctiva, are often nearly impossible to detect without this staining method.

If the foreign body remains embedded in the cornea for several hours, the eye will react with a ciliary injection of the globe, limited at first to a sector adjacent to the area nearest the foreign body, which serves as a clue to its approximate location, after several more hours encircling the whole circumference of the cornea.

Removal of a foreign particle from the cornea requires surface anesthesia of the eyeball, which will make the cornea insensitive and at the same time insure better cooperation on the patient's part, which, in turn, makes the job of removing the object much easier for the operator. Every physician has probably his own first choice of an anesthetizing agent; those most widely used are Pontocaine (Tetracaine) ½ or 1 per cent solution and Cocaine 2 or 4 per cent. If the eyeball appears much irritated, one drop of adrenalin chloride 1:1000 will aid decongestion. After two to three minutes the cornea should be sufficiently anesthetized. The patient is instructed to look steadily at some object several feet away, with both eyes open, in the direction which makes the eye most accessible for removal of the foreign body.

The most practical instrument to use is a curetting spud with a sharp rounded spade tip; if not available, a small hypodermic needle attached to a 2 cc. syringe will do. In removing the foreign body it is essential to lift it out from behind so as not to break it up into smaller pieces, which would make subsequent removal of the remaining part more difficult. Occasionally one sees cases in which a previously treating physician has removed only the protruding part of the foreign object without getting the portion that is actually embedded. Removal of this remainder several hours or possibly a whole day later is an unpleasant task and would have been unnecessary had the proper technic been used in the first place. The longer even a tiny portion of the foreign particle remains in the eye the more inflammatory reaction has set in, the eye has become increasingly sensitive and infiltration surrounding the foreign object will delay the healing process.

It happens occasionally that, after removing a partical of iron from the cornea, especially if a day or more has elapsed since the injury, a rust stained ring remains visible. This may require careful scraping as this type of stain, no matter how faint, continues to act as a foreign substance and consequently to produce inflammatory reaction. Another point to bear in mind is not to damage the corneal epithelium in the surrounding area in the process of removing the foreign object as this again will delay recovery.

Whether the foreign body is steel, emery, glass or organic substance, the corneal spud is by far the safest and most efficient instrument to use; a magnet is dispensable even if the object happens to be magnetic. I advise against the use of a wire loop, which is incorrectly shaped, much too flexible and impractical in every respect.

Corneal abrasions are frequently encountered in everyday practice and are caused by some object brushing against the eyeball, for example, the limb of a tree or a baby's fingernail; they are virtually invisible unless stained with Fluorescein and painful enough to require the application of an anesthetic solution or ointment, as well as local administration of an antiseptic or antibiotic for prevention of infection. The eye should be covered with a patch to eliminate further irritation by friction of the winking lid and to relieve photophobia. The patch is removed at intervals for the purpose of reapplication of the prescribed medicament. If it is a patient's first experience in having an eye patched, he should be told that his depth perception will be poor; consequently, he should be warned against driving a car or handling dangerous machinery as long as he has the use of but one eye.

Some ophthalmologists claim anesthetic ointments delay the prompt epithelization of the cornea, and solutions are preferable in the treatment of abrasions and other corneal lesions; in my experience the opposite has been found true; no delay in healing has been observed from the use of ointments, but the patient has certainly been kept more comfortable and, because of their more lasting effect and prolonged contact with the injured tissue, less frequent applications are required. The healing time of a corneal abrasion can now be shortened considerably since the advent of Cortisone and Hydrocortisone. Cod liver oil ophthalmic ointment has proven to be of great value in stimulating regeneration of corneal epithelium, and its wider use is advocated. Dilatation of the pupil with mydriatics or cycloplegics is unnecessary and inadvisable.

Superficial burns of the cornea are caused by sparks from matches or cigarettes or by hot grease splashing into the eye, and are treated in a similar manner as abrasions.

Flash burns (electric ophthalmia) befall not only welders but oftentimes the innocent bystander or the worker who happens to pass by some welding activity. He may not even have looked directly into the welding arc. These usually have no serious consequences. Both eyes are ordinarily involved to the same degree. The onset of subjective symptoms is always several hours delayed; the patient complains of his eyes feeling full of sand, with intense lacrimation and photophobia, to the extent that he can hardly open his eyes. He often will insist that some foreign particles got in his eyes at work and, although he is nearly always mistaken about this, it could, of course, happen that he actually has a foreign body in his eye or eyes in addition to the exposure to the welding arc; therefore, it is advisable to search for possible foreign objects in the conjunctiva and cornea. The accepted treatment for flash burns comprises repeated instillations of a solution of Pontocaine and adrenalin chloride and cold wet compresses. This suffices to make the eyes comfortable as the condition is self-limited and usually clears up within twenty-four to forty-eight hours.

Chemical burns occur predominantly in industries but not infrequently in the home also. Alkaline burns are always more serious in nature and more apt to cause late complications, such as symblepharon, than acid burns. The logical procedure to follow would be to irrigate the burned eye with copious amounts of a neutralizing solution, providing the chemical nature of the offending agent is known. As often as not, however, the patient is not certain, and rather than wasting valuable time by attempting to find out whether the solution that splashed into the eye was lye or acid it is wiser to proceed immediately by flushing the eye with physiological saline solution or even plain water, preferably with a DeVilbiss irrigator, which releases a fine, rather forceful stream, and to continue doing so until one is reasonably sure that all foreign or precipitated material has been washed out. Loose shreds of mucous or necrotic membrane should be carefully peeled off and the eye cleaned as thoroughly as possible. A mild antiseptic ophthalmic ointment is applied and the eye is examined and treated daily for further debridement until completely well.

Subconjunctival hemorrhages are brought about either by external force, like a blow on the eye (boxing, automobile accidents, etc.)—and only then can they be considered true eye injuries—or by violent sneezing, coughing and the like. They look more frightening than they actually are and require no treatment when limited to a small sector or even a quadrant of the eyeball. They will gradually disappear in due time without residue. When extensive and unsightly, possibly encircling the cornea and involving the whole visible portion of the globe and producing chemosis of the bulbar conjunctiva, cold compresses will assist in reducing the swelling. Cortisone is contraindicated as it is known to hinder absorption of blood. The vision is not affected.

Injuries which involve deeper structures of the eyeball (iris, retina, intraocular foreign bodies, perforating trauma) are best referred to an ophthalmologist. For first aid, all that may be required for the general practitioner to do is to cover the eye with a sterile pad and give the patient an injection of an antibiotic and, depending on the type of injury, tetanus toxoid.

One word of advice. It is good practice to test the patient's visual acuity before he is dismissed—even after treating only a minor eye injury—to avoid future embarrassment in view of legal action in connection with accidents. This is of particular importance in compensation cases.

SUMMARY

Relatively simple procedures for the recognition and treatment of commonly occurring superficial eye injuries, such as foreign bodies in conjunctiva and cornea, thermal and chemical burns and corneal abrasions are discussed. Correct diagnosis and appropriate therapy can contribute immensely to the prevention of complications, the comfort of the patient, quicker recovery and conservation of eyesight.

Woodruff Bldg.

Antacid Therapy of the Uncomplicated Peptic Ulcer

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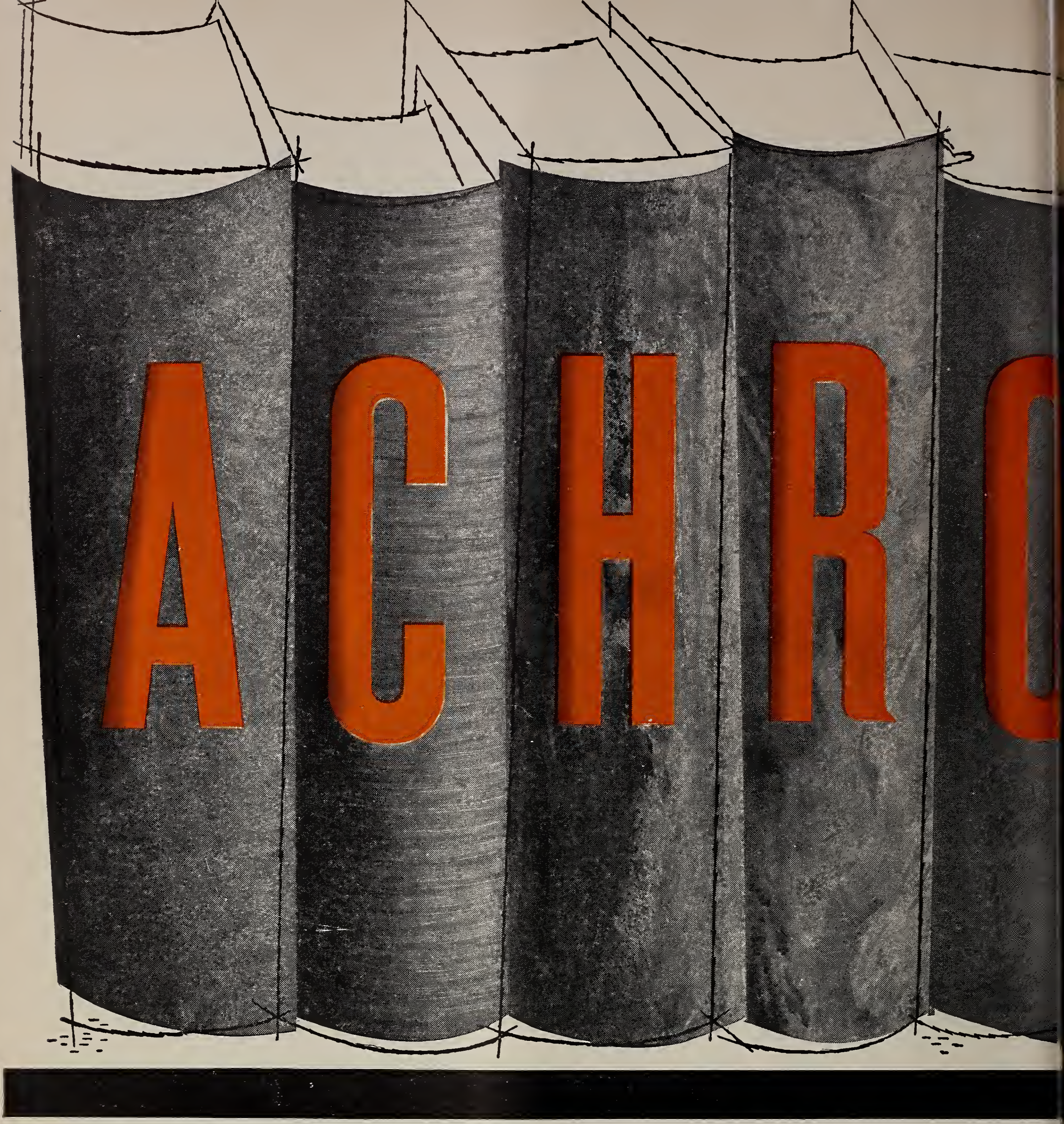
Peptic ulcer is one of the most frequently encountered recurrent diseases for which there is specific therapy. The use of antacids for "stomach ulcers" is almost universally known to the laity as well as the physician. Their popularity is evidenced by the listing of more than one hundred such proprietary formulas in the 5th Edition of "The Modern Drug Encyclopedia." In the uncomplicated gastroduodenal ulcer antacids have withstood the test of time better than any other single remedy.

Why then do patients at times fail to respond to this type of therapy, assuming the diagnosis is correct? A brief review of the physiologic principles, on which treatment is based, will help answer this question. Although the basic causes of why a patient develops a peptic ulcer are unknown, the ability of the stomach to secrete free hydrochloric acid is generally considered necessary. There are few well substantiated reports in the literature of peptic ulcer in the presence of histamine achlorhydria. The relationship of hydrochloric acid to ulcer pain has been clearly shown by Walter Palmer and others. As early as 1926 Palmer[1] showed that .5 per cent hydrochloric acid injected in the empty stomach of an ulcer patient would produce typical pain and if the stomach were emptied it would disappear. Or, if prior to the acid injection, alkali was placed in the stomach were emptied it would disappear. *Or if a similar acid solution were placed in a normal stomach no pain would occur.* Inasmuch as this and other evidence indicates that free hydrochloric acid plays an active part in the production of ulcer pain, and that its presence is probably essential to the formation of a peptic ulcer, the logic of antacid therapy may be considered established. In the uncomplicated peptic ulcer adequate neutralization of acid should bring relief and healing. This leads one to the premise that, provided the cooperative patient does have an uncomplicated ulcer, he will fail to get relief only if his antacid therapy is inadequate and insufficient.

It is a common experience to ask an ulcer patient if he has been taking one of the well known antacid preparations and to find that he has, but without relief. Often one will discover that it has been taken four or five times a day, perhaps before meals, after meals, or only when uncomfortable. Frequently little regard is paid to the physiology of gastric secretion which dictates the proper schedule of antacid therapy.

It is accepted that the glands of the stomach secrete continuously.[2] Because of this continuous secretion of gastric juices it is often advisable with an active ulcer to give a reliable antacid with 60 to 90 cc. of milk and cream every hour from 7:00 a.m. to 9:00 p.m., and at least every two hours from 9:00 p.m. to 7:00 a.m. Night neutralization is extremely important because of the large amount of acid secreted at that time, undiluted by food or drink. It is vital, however, that no hard and fast regimen be established. In a few patients hourly medication throughout the twenty-four hours may be required, or milk may be necessary on the hour, with antacid on the half hour, at least during the day. At times a constant intragastric drip will initiate healing when other measures have failed. Choice of the antacid used should not be rigidly adhered to without variation. Continuing distress is at times eliminated by substituting one antacid for another. Calcium carbonate and aluminum hydroxide preparations are of proven merit.[3] Two teaspoons of calcium carbonate powder, or a tablespoon of the aluminum hydroxide per dose, ordinarily suffices if either of these are used. Sodium bicarbonate, justly fallen into disrepute because of a fear of rebound acidity and production of systemic alkalosis, can be judiciously used for isolated epsiodes of severe pain occurring in the midst of a proper neutralization program. This may immediately relieve the pain and allow the patient to relax to the extent that he will better respond to his treatment.

For maintenance during the latter portion of the four to eight weeks it requires an active ulcer to heal, and following resumption of more regular meals, an antacid may be given six times a day. One can derive a guide to the times for medication from three mechanisms by which the base-line secretion of stomach juices is interrupted by an increased output. The cephalic phase operates at the sight, smell or thought of food; the gastric phase through stimulation of the gastric wall when food enters the stomach, and the intestinal phase occurs as food products



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enter the small intestine. The first phase secretion is largely neutralized by the presence of food and the second partially so, but the third occurs as the stomach is beginning to empty, or has emptied to a considerable extent, and may be largely unprotected. Administration of antacid about one half hour following meals is chosen because the stomach is beginning to empty in the face of increased secretion due to the completion of the gastric phase of stimulation and the commencement of the intestinal phase. Between meals and at bedtime are designated to coincide with the maximum action of the intestinal phase. While the application of experimental findings to working conditions may not be strictly justifiable, they offer a foundation for treatment and one patients can appreciate. During this convalescent period it may well be wise to have an additional milk feeding and antacid dose at 1:00 or 2:00 a.m. The question of when to dispense with a strict program cannot be answered didactically. It depends on the total picture of the illness, including the physician's estimate of the patient's personality, and the individual characteristics of his reaction to his ulcer.

The response to intensive treatment is important. If the patient is hospitalized and does not become pain free on a continuous neutralization program within forty-eight hours, or a few days at the most, then posterior penetration, obstruction or some other complication should be suspected. The uncomplicated ulcer will respond to a program of therapy consisting of an antacid suitable to the patient given frequently enough and in sufficient quantity accompanied by milk or milk and cream.

609 Cherry St.

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Premedication for Operative Procedures

Fundamental Considerations in Selection

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Premedication is essential to the proper conduct of any operative procedure regardless of its magnitude. Each patient presents a unique problem and thereby requires a specific evaluation prior to the selection of his preoperative medication in accordance with the selection of his anesthetic and proposed surgical procedure. The continuous introduction of new drugs and the clinical trials of older ones has provided the physician with materials that have greater pharmacologic specificity and fewer side effects. It is no longer advisable to administer to every preoperative patient a routine dose of morphine and atropine. The drug or drugs selected for premedication should be based on their pharmacologic effects and thereby their compatibility with the physical status of the patient, the anesthetic drugs to be employed and the proposed operative procedure. Since the majority of physicians perform surgical procedures of varied scope, it is the purpose of this paper to review the reasons for using premedication and to aid physicians in selecting drugs with specific pharmacologic activity capable of preventing or reversing many problems before or after they arise.

It is therefore in order that the advantages that may be obtained from satisfactory premedication be outlined: (1) minimize apprehension and fear, (2) provide analgesia and decrease reflex irritability, (3) by a combination of (1) and (2) lower the metabolic rate and in turn reduce the total dosage of anesthetic drug necessary and greatly facilitate induction of anesthesia, (4) inhibit secretion of the salivary glands and the respiratory tree, (5) incidental effects resulting from inherent properties of the various drugs and not characteristic of any one group as a whole.

As has been indicated, several different pharmacologic responses are desirable and therefore more than one drug is usually needed in preoperative medication. There are available for sedation, analgesia and reduction of reflex irritability, the narcotics; for hypnosis, the short acting barbiturates; for inhibition of secretion, the parasympathetic depressants, atropine and others. It will be pointed out in specific instances that the various drugs in each of these groups produce the desired effects in different degrees and with several wanted or unwanted side reactions. From a knowledge of these qualities and variations, appropriate medication may be selected. A summary of the pertinent pharmacology of the most useful drugs follows.

1. DRUGS USED TO MINIMIZE APPREHENSION AND FEAR, PROVIDE ANALGESIA AND REDUCE REFLEX IRRITABILITY.

a. *Morphine.*—Morphine is an alkaloid derivative of opium. It is a potent analgesic and a direct metabolic depressant. It causes a descending depression of the cerebrospinal axis, producing psychic sedation which may extend into dreamless sleep. Respiratory function is depressed, manifested by a rather marked depression of respiratory rate. The vomiting center is stimulated. Morphine dosage appropriate for premedication ranges from gr. 1/60 for a 2 year old child (not recommended) to the upper extreme of gr. ¼ for a robust adult.

b. *Demerol (Meperidine).*—Demerol is a synthetic piperidine capable of producing sedation, euphoria and a carefree state. It is a moderately potent analgesic. There is often a side effect of drying of the mouth, but this action is so mild compared to what is needed that it cannot replace a parasympathetic depressant. Respiratory depression also occurs in proportion to dosage given and is considered now by some to be equivalent to that from morphine. Nausea and vomiting is usually less of a problem with demerol than with morphine. Dosage ranges from 25 mgs. for a 6 year old child to 100 mgs. for an average adult.

c. *Methadon (Dolophine)*.—Methadon is also a synthetic drug which depresses the cerebrum only in large doses, but does not allay apprehension. For this reason it is unsuitable for preoperative medication unless a barbiturate is also given. The analgesic effect of methadon is comparable to that of morphine in equivalent dosages. This drug may stimulate the salivary glands, causing increased secretions. Respiration is depressed by moderate to large doses, which may also cause vomiting. The average dose of methadon for an adult is 5 mgs.

d. *Dilaudid*.—Dilaudid is an opium alkaloid ten times more toxic than morphine and likewise ten times more potent as an analgesic. The respiratory function is depressed considerably more than by morphine and, for this reason, may be considered contraindicated prior to any anesthetic drug which also depresses respiratory function. The vomiting center is somewhat less stimulated than by morphine or demerol. Dilaudid is not recommended for use in children. The average dose for premedication in the adult is gr. 1/32.

N.B. Narcotics should be administered subcutaneously in order that a more prolonged absorption and duration of action can be anticipated. Intramuscular dosage gives a rapid onset with an abbreviated duration of action and hence a failure to achieve the desired effects from the premedication.

2. DRUGS USED TO PROVIDE HYPNOSIS.

a. *The short acting barbiturates*.—The members of this group most frequently utilized are nembutal, amytal and seconal. Phenobarbital is not ordinarily used as a premedication drug because of its longer action. Depending on dosage administered and response of the individual, the effect of these drugs range from sedation to hypnosis. They possess no ability to obtund pain responses. With larger dosages, amplitude of respirations may be diminished. The vomiting center is depressed, with a reduction of nausea. Barbiturates have an additional faculty of being able to prevent or modify systemic (toxic) reaction to injected local anesthetic drugs. The principal uses of the barbiturates are to afford a patient a good night's sleep prior to surgery or to subdue a patient's anxiety during the morning prior to surgery. The barbiturates are usually administered orally in dosages ranging from gr. ¾ for children up to gr. 3 for adults, and should be given at least two hours prior to surgery. Occasionally the short and ultra short acting barbiturates are administered rectally to produce basal narcosis, which is in a sense deep premedication pushed to a stage of unconsciousness. This is usually restricted to the extremely apprehensive patient.

3. DRUGS USED TO INHIBIT SECRETIONS.

a. *Atropine*. The functions of atropine, with which we are concerned, fall into two general categories: central nervous system action and peripheral action. Centrally, atropine manifests its effects (when confined to clinically usable dosages) principally by stimulation of the respiratory function, particularly in the form of an increased respiratory rate. This is a useful factor in that it counteracts to some degree the respiratory depression of the narcotic portion of premedication. In unduly large doses such effects as restlessness and irritability, or even delirium and hallucinations, may be seen, but these are rare in properly selected clinical dosage of the drug. The peripheral action with which we are primarily concerned is the supression of salivary and respiratory secretions. These secretions present a major problem in that they interfere with both the transfer of the anesthetic drug and an adequate supply of oxygen into the patient's respiratory tree.

Atropine dilates the pupils and can interfere with pupillary signs as guides to depth of anesthesia. This dilatation is counteracted by narcotics when these two drugs are used together. Other disadvantages with atropine, primarily found in children, include tachycardia, flushing and hyperthermia. The latter is a delayed effect secondary to a combination of inhibition of perspiration and a possible stimulation of the temperature regulating center by large doses. In addition, atropine in reasonable pediatric doses leaves much to be desired as to overall results in secretory inhibition.

Atropine should be given subcutaneously an hour prior to surgery or induction of anesthesia in dosages ranging from gr. 1/300 (children 2 to 5 years of age) to a maximum for adults of gr. 1/100. In an urgent situation it may be given intravenously, usually gr. 1/150 for adults, ten to fifteen minutes prior to induction of anesthesia.

b. *Scopolamine*.—As with atropine, the pharmacologic effects of scopolamine fall into two areas, the peripheral and the central nervous system actions. Contrary to atropine, scopolamine causes central nervous system depression which may extend to drowsiness or even to sleep, and therefore enhances the overall sedative effects of the premedicant drugs. An effect quite specific for scopolamine is the production of amnesia for events occuring while the patient is under the influence of the drug. This benefit is often advantageous. Hallucinations may occur with the use of this drug and if pain is present the patient may become delirious. The latter effect is seen with particular frequency when scopolamine is used in obstetrics for medication during labor. Disorientation occasionally occurs in children and elderly patients, even in the absence of pain, and is the chief reason for the contraindication of this drug in these age groups. Like atropine, scopolamine is capable of respiratory stimulation and can counteract the respiratory depression of narcotics. Peripherally, scopolamine is a more effective inhibitor of secretions than is atropine. Like atropine, it causes pupillary dilatation. It does not cause tachycardia, flushing or hyperthermia in children as does atropine.

Scopolamine should be administered subcutaneously one hour prior to induction of anesthesia in dosages ranging from gr. 1/450 (children 2 to 5 years of age) to a maximum for adults of gr. 1/100.

c. *Bellafoline*.—Reports in the literature describing the use of this drug as a premedicant are extremely limited in number. The published and authors' use of bellafoline in premedication has been exclusively in the pediatric field. Like atropine and scopolamine, bellafoline is an alkaloid derivative of belladonna, chemically resembling atropine more than it does scopolamine. The secretory inhibiting properties of this drug are excellent, being at least equivalent in effectiveness to scopolamine. It is believed to be somewhat faster acting than scopolamine and on a number of occasions complete dryness of the mouth has resulted when induction of anesthesia was begun within five to ten minutes of the subcutaneous administration of bellafoline. It is recognized that the publication of clinical impressions not substantiated by statistics has at times been misleading. At the risk of this, however, we would like to state that we have been frequently quite impressed with the sedative effect of bellafoline on children. These small patients, without other premedication, often arrive at the operating room notably lacking in the severe apprehension characteristic of children, and sometimes are quite drowsy. Occasionally, their parents will report that the child had fallen asleep shortly after the bellafoline had been given. This sedation is not accompanied by discernible respiratory depression. Pupillary dilatation is also caused by bellafoline. We have experienced no incidence of the undesirable psychic side reactions referred to as related to atropine and scopolamine. Also we have not experienced the occurrence of hyperthermia.

The dosage schedule we have found most suitable follows. The administration of bellafoline subcutaneously one hour prior to surgery or the induction of anesthesia is recommended as follows:

Age (Months)	*Dosage*
0-12	0
13-24	¼ cc. (0.12 mgm)
25-48	½ cc. (0.25 mgm)
49-72	¾ cc. (0.37 mgm)
73+	1 cc. (0.50 mgm)

An added advantage of bellafoline is the ease with which correct dosage may be administered by nursing personnel. The drug is available in 1 cc. ampules containing 0.5 mg. Appropriate dosages may be ordered in fractions of a cubic centimeter.

In summary, the advantages of scopolamine over atropine are superior secretory inhibiting power and amnesia production but, for reasons given, it is not recommended for children or for adults over 60 years of age. For children, we have found bellafoline a superior drug for inhibiting secretion with the added advantage of mild sedation. For adults over 60 years of age we have found that atropine has a satisfactory secretory inhibiting power and does not cause excitement, delirium or hallucinations in this older age group.

It is not possible to place too much stress on the importance of correct timing in the administration of premedication. The time interval of one hour prior to surgery or induction of anesthesia has been indicated repeatedly in regard to giving the narcotics and parasympathetic depressants. There are several good reasons for this. After this period of time, the maximal sedative and analgesic effect of the narcotics has developed, and respiratory depression is at its peak. Dryness of the mouth and respiratory mucosa is optimal. If premedication is given too early, these effects will be found decreasing. This may result in the requirement of more anesthetic drug and, frequently, the development of secretory obstruction during the anesthetic. If premedication is given too late, the patient arrives in surgery inadequately sedated and apprehensive. Here again an increased amount of anesthetic drug is needed and a more difficult induction results. If the anesthetic drug is one which causes respiratory depression, this effect is then aggravated when the premedication attains its full activity.

Having discussed the purpose in selecting premedication for operative procedures and the pharmacologic effects of certain drugs, it is well to discuss briefly their usage in various age groups and in the more commonly used anesthetic technics of today.

Problems of premedication in relation to the age group follow.

GERIATRIC PATIENTS

Problems.—These patients are being seen more frequently in the operating room for more formidable procedures. Their reserve becomes less with increasing decades and therefore they are not always able to handle situations of stress and strain. Their cardiovascular systems have been confronted with many years of use, and often abuse, thereby presenting the most common problem. Degenerative changes of the excretory and detoxifying organs allow overdosage to occur. Their central nervous systems behave with comparative sluggishness, responding to small doses of drugs.

Suggestions.— 1. Small doses of narcotics are adequate in the absence of pain, i.e., demerol 50 to 75 mgs., morphine sulphate gr. 1/8 to 1/12.

2. Their secretory mechanisms are fairly active and they are often normally disorientated without need for further drug induced disorientation. Although scopolamine is a superior secretory inhibitor, it is notorious for leaving the elderly patient confused and hard to manage in the preoperative and postoperative periods. Therefore, in the patient over 60 years of age atropine should be used (gr. 1/150).

3. Barbiturates also tend to complicate care of the geriatric patient, resulting in confusion, restlessness and disorientation during the preoperative and postoperative periods. Their use is not indicated.

PEDIATRIC PATIENTS

Problems.—The advantages to be derived from proper premedication of children necessitates its use. However, considerable care must be exercised in selecting drugs and accurately measuring dosage.

Open drop ether with or without inducing drugs serves as the most frequently used technic in pediatric anesthesia. The many reasons for this will not be presented in this discussion. The underdeveloped central nervous system, labile thermal center and mental instability are the problems of paramount importance to be considered.

Suggestions.—1. Narcotics may be used in the older age group (6 to 14 years). Demerol is the drug of choice, as overdosage with morphine has resulted because of inability of the administrators to compute accurately apothocarial dosage or convert to metric figures.

Age	*Demerol Dosage*	*Morphine Dosage*
6-9 years	25 mgs.	gr. 1/16
10-12 years	50 mgs.	gr. 1/12
13-15 years	75 mgs.	gr. 1/8
16+	100 mgs.	gr. 1/6

2. Open drop technics with ether and inducing drugs such as vinethine are most commonly employed in the pediatric patient. These drugs stimulate secre-

tions and thereby slow induction as well as creating obstructions. Large doses of atropine are necessary for adequate inhibition of secretions and this dose often is toxic to the child, resulting in marked elevation of temperature and rapid pulse. Scopolamine produces confusion, but is superior to atropine. In our experience, bellafoline is most ideal in this age group. Secretions are suppressed at least equally as with scopolamine without the side effects seen with atropine and scopolamine. Bellafoline dosage varies from 0.125 mgs. in the 2 year old to 0.500 mgs. in the 6 year old and over. (Refer to dosage chart under bellafoline).

3. Small dosages of barbiturates are good sedatives and reduce the amount of anesthesia needed. Children are apprehensive and drugs which sedate without undue depression increase the safety during the induction period. (Sodium luminal gr. 1 to gr. 2 intramuscularly in the 3 to 8 year old group, seconal gr. ¾ orally or rectally in the 8 to 12 year old group, and seconal gr. 1½ in children more than 12 years.)

ADOLESCENT PATIENTS

This group requires dosages of drugs almost equal to the adult. The selection of premedication depends on the anesthetic to be employed, physical condition of the patient and operative procedure proposed. Problems that may arise are specific and not inherent to the group as a whole.

Problems of premedication in relation to the technic of anesthesia follow.

CYCLOPROPANE

Problems.—Depresses respiratory center and reflexly sensitizes the myocardium to epinephrine.

Suggestions.—1. Low dosages of narcotics are necessary to minimize the depression of the respiratory center. Adult dosage: morphine sulphate gr. 1/12 to 1/8; demerol 50 to 75 mgms.

2. Scopolamine and atropine may be used for parasympathetic depression. Scopolamine is probably preferred due to its superior secretory inhibitory effects and the amnesia it produces. Adult dosage: Scopolamine gr. 1/150.

3. Barbiturates are not contraindicated in moderate amounts. Adult dosage: nembutal or seconal gr. 1½ two hours before surgery.

ETHER

Problems.—Stimulates secretions and irritates respiratory tree, thus prolonging induction.

Suggestions.—1. Narcotics may be used in dosages which offer all the advantages previously listed resulting in smoother induction and anesthesia. Adult dosage: morphine sulphate gr. 1/6 to 1/4; demerol 100 mgs.

2. Scopolamine is indicated for secretory inhibition. Adult dosage: gr. 1/150.

3. Barbiturates as desired to round out desired medication. Adult dosage: nembutal or seconal gr. 1½ to 3.

VINETHINE

Problems.—A potent drug that markedly stimulates secretion.

Suggestions.—1. It is necessary to use a larger dose of secretory inhibitors. Bellafoline is superior in children as discussed previously, and scopolamine for the adult. Adult dosage: gr. 1/150 to gr. 1/100.

2. Narcotics and barbiturates are advantageous as discussed previously, and should be used in the dosage corresponding to the age group. Adult dosage: morphine sulphate gr. ⅛ to gr. ¼; demerol 100 mgs.; nembutal or seconal gr. 3.

PENTOTHAL

Problems.—Primarily a sedative without analgesic properties, producing anesthesia through profound depression. The laryngeal reflexes are hyperactive, with sneezing, coughing, hiccoughing, laryngospasm and bronchospasm complicating the administration.

Suggestions.—1. Narcotics furnish some analgesia, thus lowering the amount of pentothal necessary and aiding in depressing reflexes. Adult dosage: morphine sulphate gr. 1/6 to gr. 1/4; demerol 100 mgs.

2. Parasympathetic depressants also aid in blocking efferent reflex areas as well as secretory inhibition. Adult dosage: atropine gr. 1/100.

3. Barbiturates may or may not be used. If they are used it must be realized that accumulative effect is to be expected and the dosage of pentothal adjusted accordingly.

NITROUS OXIDE OR ETHYLENE IN COMBINATION WITH PENTOTHAL

Problems.—Neither of these anesthetic gases are potent.

Suggestions.—1. The analgesia furnished by narcotics allows more oxygen to be used with nitrous oxide or ethylene, as well as decreasing dosage of pentothal. Adult dosage: morphine sulphate gr. 1/6 to 1/4; demerol 100 mg.

2. Parasympathetic depressants are indicated. Adult dosage: atropine gr. 1/100.

NITROUS OXIDE OR ETHYLENE ALONE

Problems.—Weak anesthesia. No problems if adequate oxygen is given.

Suggestions.—1. Narcotics allow greater oxygen tension to be used. Adult dosage: morphine sulphate gr. 1/6 to gr. 1/4; demerol 100 mgs.

2. Parasympathetic depressants are indicated. Adult dosage: atropine gr. 1/100; scopolamine gr. 1/150.

3. Barbiturates furnish sedation and, as with narcotics, allow increased oxygen tensions to be used. Adult dosage: nembutal or seconal gr. 3.

CONDUCTION ANESTHESIA

Problems.—Patients are conscious and often do not desire to be aware of their surroundings. Long surgical procedures result in restlessness. Traction reflexes and drops in blood pressure result in discomfort, nausea and vomiting. When large dosages of local anesthetics are used it is not uncommon to experience systemic reactions.

Suggestions.—1. Heavy premedication is required. Narcotics in dosages which are average or above aid in adequately sedating the patient. Adult dosage: morphine sulphate gr. 1/6 to 1/4; demerol 100 mgs.

2. Scopolamine will furnish amnesia and is especially valuable if supplementary anesthesia is needed. Adult dosage: scopolamine gr. 1/150.

3. Since the primary problem associated with premedicating the patient who is to receive a form of regional anesthesia is sedation and hypnosis, the barbiturates are specifically indicated. If convulsions arise from a systemic reaction to local anesthetic drugs, a minimal amount of an intravenous barbiturate

will temporarily decerebrate the patient to this cortical stimulation. Adult dosage: seconal or nembutal gr. 1½ to gr. 3. An intravenous drip of a dilute pentothal solution is often used during regional anesthesia to obtain a desired state of sedation.

SUMMARY

Realizing that most all physicians administer some form of anesthesia in their daily practice, we have reviewed the fundamental considerations in selecting specific drugs for use as premedicants. The pharmacologic actions of the drugs most commonly employed for premedication are presented. Particular emphasis is given to the drug bellafoline and its use as a parasympathetic depressant in the pediatric patient. The problems associated with selection of premedicant drugs in relation to age groups and the anesthetic to be given are presented and suggestions made as to the drugs that should be employed.

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Rupture of the Uterus

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Rupture of the uterus is a relatively rare complication of pregnancy and labor. This complication is a most serious one and presents an obstetrical emergency that usually must be recognized and treated immediately in order to prevent maternal death. There are many comprehensive reports in the literature presenting the statistical incidence, the etiology, mortality and recommendations for prevention and treatment of this accident. Many large institutions in the country have recorded their incidence of rupture of the pregnant uterus and compilation of these articles reveals 766 uterine tears in 1,131,430 deliveries. This represents an incidence of one to 1,477 deliveries.[1-12] The lowest frequency occurred in the Philadelphia County Hospital between 1931 and 1941 when delivery of 318,103 patients was accompanied by 105 uterine tears for an incidence of one to 3,029.[3] These statistics demonstrate the frequency of rupture of the uterus in any group of maternity patients, even though most of the reporting hospitals are medical centers and are the recipients of complicated and mismanaged patients.

A study of rupture of the uterus has been made by reviewing all the private patients delivered by the Woman's Clinic between the years 1939 and 1954. During this time 13,683 deliveries were accompanied by four ruptures of the uterus. These figures represent an incidence of one to 3,420 deliveries. Of these four patients with uterine rupture, two occurred spontaneously, one followed previous cesarean section and one was the result of trauma and placenta previa. Two of these patients were referred to us after the onset of labor. Statistically, so few cases are negligible but a study of the clinical aspects of these cases is important. The clinical history and treatment of these patients follows.

RUPTURE THROUGH UTERINE SCAR

This form of rupture is most frequently found to occur through previous cesarean scars. Classical scars are more prone to rupture than low segment scars. Cervical scars from lacerations or surgical procedures may also provide a site of rupture.

Patient 1. A 28 year old multipara's previous pregnancy had been terminated by cesarean section after repeated attempts at forceps delivery. The fetus weighed 8 pounds 9 ounces. She had a septic postpartum course with phlebitis. Prenatal course during the second pregnancy was uneventful, and early elective cesarean section was contemplated. The date for cesarean section was set eighteen days before the expected date of confinement. Three days before entering the hospital the patient was eating dinner and was seized with a sudden severe pain in the abdomen. She was admitted to the hospital in shock, heart tones were absent and fetal parts were palpable just beneath the abdominal wall. Immediate laparotomy was done, and an 8 pound 9 ounce fetus, placenta and an estimated 1,000 cc. of blood were found free in the abdominal cavity. The previous cesarean section had been done by completely bisecting the uterus. The uterus had been incised longitudinally through the fundus, the incision extending downward through both the anterior and posterior walls of the corpus to the lower uterine segment. Only the anterior uterine scar had ruptured, with the posterior scar remaining intact. This uterus is shown in figures 1 and 2. A subtotal hysterectomy was done. The post-

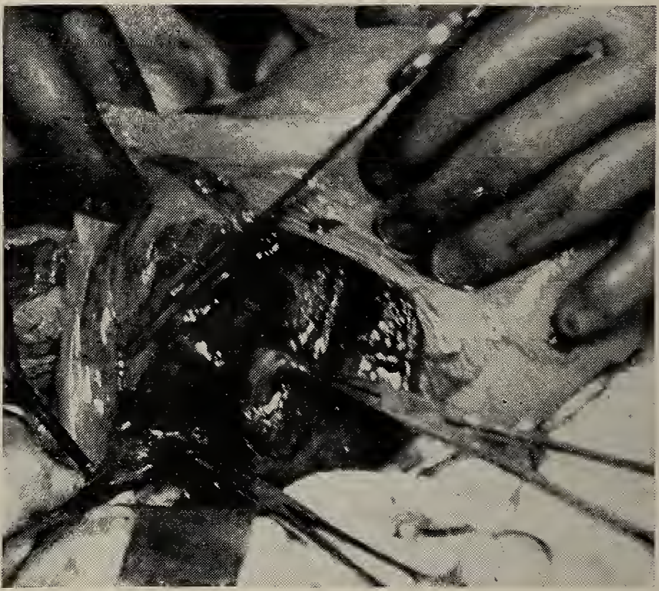

Fig. 1. Rupture of anterior portion of uterine incision made at time of previous cesarean section. Incision was made through the entire fundal portion of the uterus.

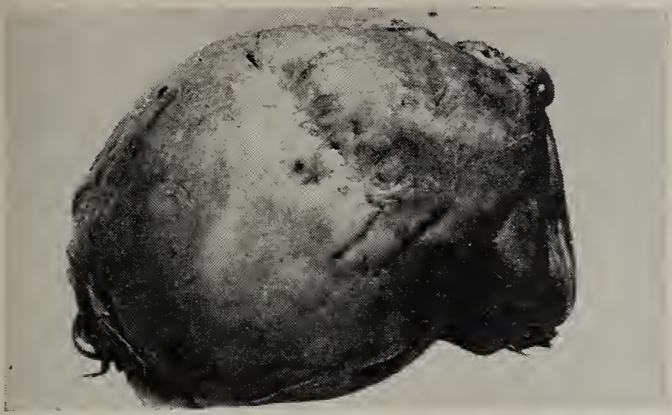

Fig. 2. Posterior aspect of the same uterus seen in figure 1, demonstrating poorly healed and scarred but intact portion of the incision.

partum course was uneventful except for recurrence of the phlebitis.

SPONTANEOUS RUPTURE

Multiparity predisposes to rupture during either precipitous or prolonged difficult labors. Other factors include previous difficult labors, feto-pelvic disproportion, contraction ring, low implantation of the placenta and injudicious use of posterior pituitary substance. Rupture in these cases is usually through the lower uterine segment.

Patient 2. A 32 year old multipara's two previous labors had been of 18 hours and 20 hours duration. Both pregnancies were terminated by difficult forceps deliveries. The babies weighed 7 pounds 10 ounces, and 8 pounds 11 ounces, respectively. Physical examination during the third pregnancy revealed an old healed laceration of the cervix. Her present prenatal course was uneventful. On hospital admission there was no bleeding, membranes intact and contractions were occurring every 5 minutes. After 13 hours of active labor no progress was evident so the membranes were ruptured artificially. Labor continued and at the end of 18 hours the cervix was thought to be dilated 8 cm. with the head just entering the pelvis. After 25 hours of labor the patient began to complain of continuous abdominal pain, and noted thirst. The patient was pale, blood pressure was 80/60 and the uterus was tender and firm. Fetal heart tones were absent and contractions were believed present at 2 to 4 minute intervals. Vaginal examination revealed the presenting part 1 to 2 cm. below the spines with a small rim of the cervix still present. She was given 1,000 cc. 5 per cent glucose in water and 500 cc. whole blood with gradual improvement in her condition. No uterine contractions were apparent after 35 hours. Another drop in blood pressure occurred at 38 hours. Following consultation, a vaginal examination was done and the presenting part promptly moved upward out of the pelvis and into the abdomen. Laparotomy was done immediately. The fetus and placenta were found free in the abdomen together with a large amount of blood. There was a complete laceration through the right side of the lower uterine segment into the right broad ligament with a large hematoma in the broad ligament. This uterus is presented in figures 3 and 4. A subtotal hysterectomy and right salpingo-oophorectomy was done. During operation, the patient received 2,000 cc. of whole blood. Her postoperative course was relatively uneventful except for temporary paresis of both legs.

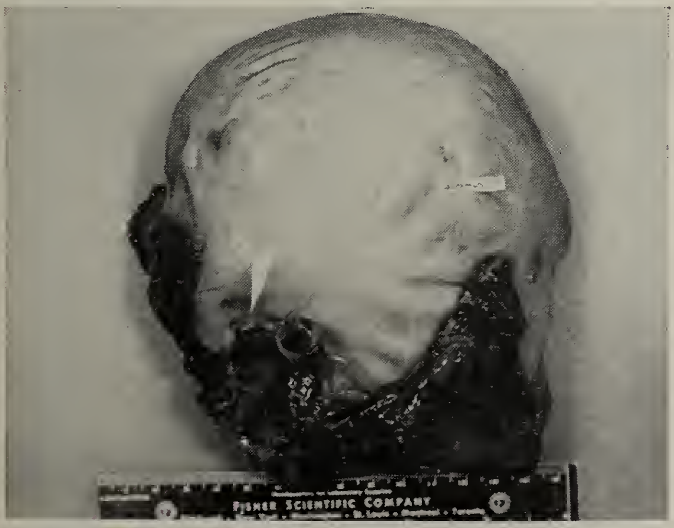

Fig. 3. Uterus removed following spontaneous rupture. Note laceration extending from right cornu down through the lower uterine segment and cervix.

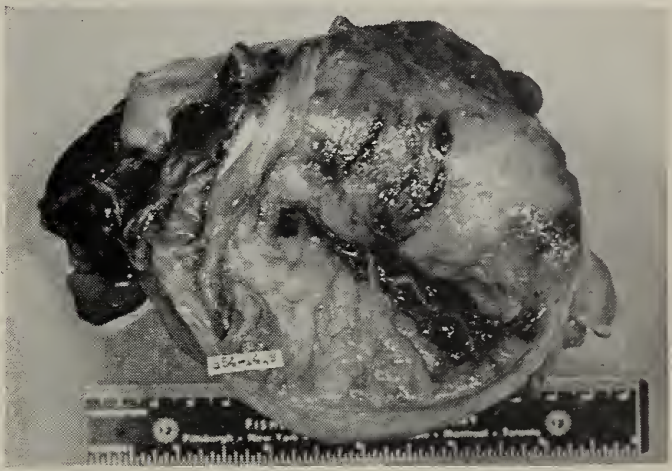

Fig. 4. Lateral view of site of spontaneous rupture of the uterus demonstrating extension of laceration.

Patient 3. A 32 year old multipara had a history of two previous pregnancies terminating in forceps deliveries of 8 and 11 pound infants. Both babies were delivered in the home and the 11 pound baby was a difficult forceps delivery. Prenatal care with her third pregnancy began 20 days before delivery. She was found to have a 4 cm. leg ulcer, and a lacerated cervix and perineum. Laboratory findings included a positive Kahn, normal urine, blood sugar and nonprotein nitrogen. Fetal heart tones were heard on prenatal office visits. On admission to the hospital, the patient was having extremely hard uterine contractions at 3 minute intervals. The cervix was dilated 6 cm. with the vertex presenting in mid-pelvis. Fetal heart tones were absent. The membranes ruptured spontaneously, and labor ceased. Vaginal examination revealed 6 cm. dilation, with vertex at level of spines. The patient had received no medication or anesthesia and was perfectly comfortable. Blood pressure and pulse remained normal. The fetal head was pushed up and it came back down to the same station. Uterine rupture was considered because of the abrupt cessation of hard uterine contractions but with the excellent condition of the mother, observation was decided upon. Six hours later, the abdomen became extremely tender, the pulse quickened and fetal parts became palpable just beneath the abdominal wall. The contours of the abdominal wall with fetus free in the abdominal cavity is shown in figure 5. Lapa-

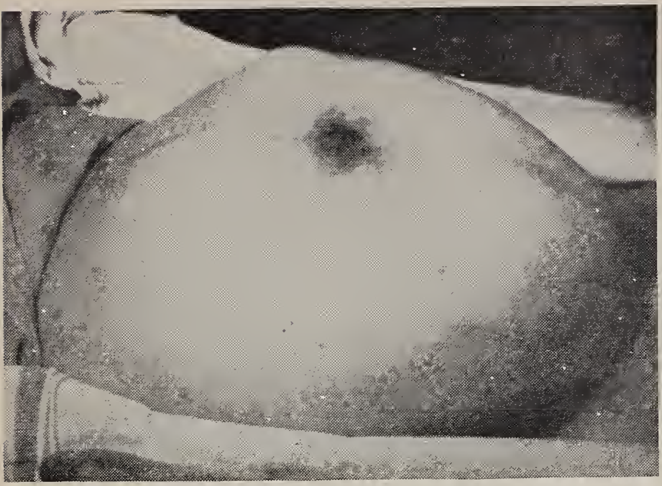

Fig. 5. Abdomen following rupture of gravid uterus. Fetus was found completely outside of uterine cavity. Note irregular conformation of the abdomen with tenting of abdominal wall by fetal parts.

rotomy was done, and a 9 pound baby, placenta and a minimal amount of blood were found in the abdominal cavity. The lower uterine segment was torn transversely. The fundus was firmly contracted. Subtotal hysterectomy was done. The postoperative course was uneventful except for complete urinary retention for three weeks and difficulty starting flow of urine for several weeks thereafter.

TRAUMATIC RUPTURE

Version is by far the most frequent etiologic factor in traumatic rupture of the uterus. Rupture in this group is usually through the lower uterine segment. Due to the fact that many of these patients are either heavily sedated or anesthetized at the time of injury, pain and abdominal tenderness are of little value in diagnosis.

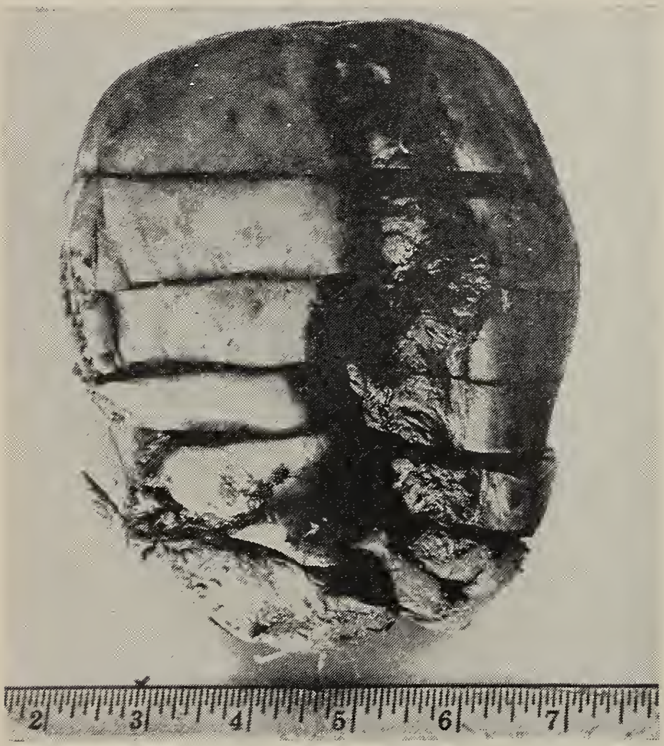

Fig. 6. Uterine laceration found at time of operation. The rent extends from the mid-portion of the fundus through the lower uterine segment and cervix into the vagina. Complete hysterectomy performed.

Patient 4. A 32 year old multipara had delivered three previous pregnancies spontaneously. The last was a stillborn fetus at seven months' gestation. Present pregnancy had been complicated by frequent episodes of vaginal bleeding. She was admitted to the hospital at 27 weeks' gestation complaining of cramping and bleeding. After sedation, the bleeding and cramping subsided but recurred eight hours later. Moderate bleeding continued at intervals for the next twelve days. On the twelfth day, she bled rather heavily but ceased shortly thereafter. The next day bleeding continued, and severe contractions began. She was given 1,000 cc. of blood. The bleeding did not subside and the contractions became frequent and severe. She was taken to surgery where a double set-up for vaginal or abdominal delivery had been prepared. Fetal heart tones had not been audible for three hours. The placenta was found in the upper vagina. Delivery of the placenta was accomplished, and the fetal arm prolapsed through the cervix. This was replaced, a version was gently done and a stillborn infant delivered as a breech. There was no vaginal bleeding. The patient was cyanotic and in shock. Her condition did not improve and a laparotomy was performed fifteen minutes following delivery of the baby. The abdomen was found to be full of dark blood and a large rent was present in the right side of the uterus. The rupture had extended from the internal os (into the broad ligament) to the attachment of the round ligament on the right. A laceration of this type is seen in figure 6. A complete hysterectomy and right salpingo-oophorectomy was done. The patient remained in shock for three hours postoperatively. She was given 2,000 cc. of whole blood, and 500 cc. of 5 per cent glucose following delivery and during surgery. The postpartum course was uneventful.

DIAGNOSIS

Rupture of the uterus occurs so infrequently that one may become passive to the possibility of its occurrence. This often leads to dangerous delay in diagnosis. Unfortunately, rupture of the uterus does not always present a typical clinical picture. Emphasis must be placed on the marked variability of symptoms that occur, and each case must be individualized.

Recognition of predisposing factors during the prenatal period is paramount. Multiparity is a predisposing factor, especially if she is obese or has a pendulous abdomen. A previous difficult labor may leave cervical and myometrial scars. Prior operative procedures such as curettage or manual removal of the placenta may cause myometrial scarring. A rigid cervix or a cervix with scar tissue from cervical amputation, repair and deep cautery may obstruct labor and predispose to uterine rupture. Obviously, a history of cesarean section, hysterotomy or myomectomy is important. Possible uterine rupture must be considered in cephalopelvic disproportion, abnormalities of the uterus, tumors of the pelvis and abnormal fetal presentations, positions and malformations.

Spontaneous rupture of the uterus during labor is usually accompanied by a sharp, tearing pain, cessation of regular uterine contractions, shock and loss of heart tones. The fetus may be palpated directly beneath the abdominal wall and spontaneous version may occur. The presenting part may recede. Vaginal bleeding may be slight or absent. If the fetus and placenta have been extruded into the abdominal cavity so the uterus can contract, there may be no appreciable internal hemorrhage and shock. Usually pallor, weakness, dyspnea, excessive thirst, weak pulse and other signs of rapid blood loss make their appearance with alarming rapidity. The appearance of gross blood in the urine is an important finding. In some cases, pain may disappear so soon that it is disregarded. In certain cases, the patient may be conscious of hyperactive fetal movements followed by fetal death. Spontaneous rupture before labor is most likely to occur in the uterine body through some inherent or acquired defect in the uterine musculature. Rupture during labor usually occurs in the thinned lower uterine segment.

Symptoms and signs of uterine rupture through a cesarean section scar may vary greatly. Partial separation of an old cesarean scar with bulging of membranes through it may produce few symptoms. If the placenta is implanted beneath the old scar, the clinical picture will be more severe. If the separation of the old scar is complete, the symptoms will be severe and similar in type to spontaneous complete rupture of the uterus. The differential diagnosis between premature separation of the placenta and rupture of the uterus in a patient that has had a previous cesarean section is difficult. The prognosis in this type of uterine rupture is better because of the diminished vascularity in the region of the scar, and anticipation leads to more prompt recognition. It is our policy to give patients with a history of previous cesarean section a trial of labor unless their previous section was for cephalopelvic disproportion or the postoperative period was complicated by sepsis.

The lower uterine segment is the site of laceration in practically every case of traumatic rupture. Traumatic rupture as a rule is the result of an operative procedure like internal version, neglected transverse presentation, extraction through an incompletely dilated cervix, forceps rotation or breech extraction. The diagnosis is often missed because the shock and hemorrhage are presumed to be due to the difficult delivery. The true diagnosis is made only after exploration of the uterine cavity. This exploration should be done in every difficult delivery before any time is consumed doing cervical or vaginal repair.

TREATMENT

Treatment of rupture of the uterus consists of early diagnosis, rapid transfusion and operation as soon as possible. Early diagnosis and immediate laparotomy before profound shock occurs provide the best treatment for survival of the mother, and is the only way the prognosis for the survival of the fetus can be improved.

Massive intra-abdominal hemorrhage which usually occurs with uterine rupture can be treated only by the administration of whole blood in large amounts. The blood should be started as soon as the diagnosis is made. This complication, along with placenta previa, placenta abruptio and postpartum bleeding presents the emergencies that require the presence of adequate amounts of whole blood wherever women are confined. When the diagnosis of rupture is made, operation should be performed at once. Shock should not be a contraindication to surgery in this condition. Patients with no blood pressure, and receiving blood through all possible portals, will not respond to any therapeutic measure short of ligature of the vessels supplying the uterus. In delaying operation, the obstetrician is faced with continuing hemorrhage which blood transfusion alone will not counteract. It is almost always impossible to transfuse blood as rapidly as it is lost through the large torn blood vessels in a ruptured uterus. These patients frequently recover rapidly following ligation of the uterine arteries.

The immediate cause of death in this condition is shock due to trauma or massive hemorrhage. Conservative obstetrics before the incident contributes to the prognosis by decreasing the chances for invasion of virulent bacteria. Obvious contamination occurs when the uterus tears, and this becomes widespread when the fetus enters the abdominal cavity and peritonitis results. Whole blood and antibiotic therapy lessen the deaths occurring in the postoperative period. Although whole blood should be administered, only properly typed and matched blood should be given. This will lower the incidence of transfusion reaction and prevent further complication and possible death.

SUMMARY

Although relatively rare, rupture of the uterus is a most serious complication of pregnancy and labor. In the four uterine ruptures that have occurred in 13,683 deliveries by the Woman's Clinic between 1939 and 1954, two were spontaneous, one followed previous cesarean section and one was the result of traumatic delivery accompanying placenta previa. The history and treatment of these four cases are presented.

Diagnosis and treatment of this obstetric emergency have been discussed. The immediate availability of adequate amounts of properly typed whole blood is stressed. Early diagnosis, transfusion and immediate operation are methods by which the best maternal survival is obtained.

1919 S. Jefferson.

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No Boy to Do a Man's Job

. . . In looking for men to put on the Council we are not seeking to honor someone nearly as much as we are seeking to work him. We do not want an older or younger member on the Council who does not attend meetings or have interest in the proceedings. We do not want impulsive young or old members who decide without deliberation. We want the most competent and vigorous members who will attend Council Meetings and take an active part in them—because the Council is our directing force and deliberative body. In our opinion, we either go forward or stand still or go backward, according as we have, or do not have, an excellent and actively working Council.—F. T. H'Doubler, M.D., Editorial, *Bulletin of the Greene County Medical Society.*

Elective Induction of Labor

Review of Cases

R. NED WHITE, M.D., *Springfield*

THERE ARE FEW subjects in the field of present day obstetrics that can arouse as much furor as that of induction of labor. It has been said that the difference between prejudice and conviction is that one becomes angry when discussing a subject upon which he is prejudiced, but he will be willing at least to hear the other side of the question if he is only convinced of his side. That is almost the way many obstetricians approach this subject.

Those who induce some patients are accused of meddlesome interference and of being unnecessarily radical. One is dealing with a physiologic process in obstetrics, but this does not mean that it is always a benign process.

A certain number need be done for such causes as toxemia and a few other medical conditions. But, primarily, the largest number are done for the welfare of the patient. Perhaps one does not like the word "convenience," yet when a maternity patient lives 60 to 100 miles from the hospital it is for her convenience and safety that she may be induced. I do not here propose to go into all the indications for induction.

In order to ascertain whether induction is (1) safe, (2) wise, (3) advantageous to either the patient or the doctor, I decided to check each and all of those I had done in the last five years. One can produce excellent results if he leaves out all but the ideal patients that he induces, but I feel one should include the toxemia and the unfavorable patients as well to check results.

These were all done with more or less a standard technic and in one hospital. This was Burge hospital which has no interns or residents so that the cases are all under my own care and reflects the intelligent interest of the nursing staff. Without their cooperation this would certainly not be a wise procedure.

I do not propose to discuss all the methods of induction, nor to defend the method I use. Briefly it is as follows: The patient is admitted without any breakfast at about 8:00 a.m. the morning of induction. She is given the usual cleansing enema and preparation. Then she is given 3 grains of Seconal orally, 100 mg. Demerol, or 40 mg. Nisentil and 1/150 grains Scopolamine. The membranes are then ruptured using Iowa forceps. Next an intravenous infusion of 500 cc. 5 per cent dextrose in water with one ampoule of Pitocin is started. The speed is usually about 20 drops per minute, but is varied for each individual according to their contractions. The time of labor, for statistical purposes, is counted from the rupture of the membranes. If further medication is needed, then either 75 to 100 mg. Demerol, or 40 to 60 mg. of Nisentil with 1/200 Scopolamine, is used. The chief criticism of this method of course is that once one has embarked upon such a method, he theoretically is out on a limb and delivery should ensue. My own feeling is that if one has determined adequately that his patient can deliver from below and is favorable, then half way measures are often a waste of time and an expense to the patient. Following are the results of this group.

Total number of inductions	472
Multipara	349 or 74 per cent
Primipara	123 or 26 per cent
Average length of labor	
Multipara	4 hrs. 12 min.
Primipara	6 hrs. 50 min.
Shortest labor	
Multipara	30 minutes
Primipara	60 minutes
Largest baby	11 lbs., 10 oz.
Smallest baby	5 lbs.
Average weight of all	7 lbs., 6 oz.
Breech presentations	8
Brow presentations	1
Posterior presentations	9%
Maternal mortality	0
Fetal mortality	
Stillborns	1
Fetal deaths	4
Fetal mortality	1.1%

Three babies expired at eighteen, twenty-four and thirty-six hours from atelectasis and autopsies were done. One had coarctation of the aorta with almost complete closure. One was a fetal abnormality as will be described (stillborn).

There were two erythroblastotic babies that were transfused and left with their mothers in good condition. One had a partial cleft palate that was later repaired, and one had pyloric stenosis that was operated upon and recovered.

The stillborn baby which was one of the section cases is of interest. A gravida ii was completely dilated after four hours and showed slight crowning, but would make no further progress and the head could not be extracted with forceps. An intrauterine examination revealed a huge baby with massive abdomen. She was then promptly sectioned and an 11 pound 10 ounce stillborn baby was delivered which gave all gross evidence of a hydrops fetalis. On autopsy again it gave microscopic evidence of an erythroblastotic baby, yet the mother was Rh positive on repeated checks.

Poor Results: This represents those who failed to deliver within twenty-four hours of the onset of ruptured membranes.

Number of poor results	7 or 1.49 per cent
Number of those who were toxic	3
Number who had an unfavorable cervix	6
Number sectioned	3 or 6 per cent

One for toxemia and who failed to go into good labor with induction.
One for the fetal abnormality described.
One for a low lying placenta causing failure of descent after complete dilation.

All the poor results were in multiparas, but produced only the one stillborn baby as the other babies were good.

Patients who hemorrhaged represented 3 or 6 per cent.

One two hours after delivery
One three hours after delivery
One immediately after delivery of placenta. All these

were transfused and recovered. One required several transfusions.

One patient had almost tetanic contractions after only 50 cc. of the infusion, which was discontinued and she went ahead and delivered in ten hours without mishap. One developed some thrombophlebitis of one leg on the tenth day but recovered without sequelae. One patient had previously been sectioned for placenta previae and delivered within two hours.

The most important lesson learned is that the patient should have a favorable or ripe cervix, which means it should be almost effaced and the exterior os soft. A firm rigid cervix can be delivered but will cause worry and should not be undertaken unless there is toxemia. All my patients are examined with a sterile glove vaginally during the last weeks of pregnancy and the condition of the cervix thereby determined.

There are some patients who would falsify their menstrual dates and there are some who are so desirous of having their pregnancy terminated that they request induction even at the risk of a premature baby. Therefore, I pay more attention to the condition of the cervix than the expected date of confinement. One always has to remember that if some unfavorable result happens, as a fetal death, or hemorrhage, the patient has some event on which to place the blame if she has been induced. However the inducted series has a much smaller number than the average run of patients.

CONCLUSIONS

1. Elective induction is worth while and safe obstetric technic if (a) patients are chosen when the cervix is favorable; (b) if one uses it with the same care as he does his forceps.
2. Induction can be meddlesome intervention, or it may be a valuable adjunct. Its dangers lie in the doctor who does not use it with care.

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Special Article

The History of Medicine in Springfield

F. T. H'DOUBLER, M.D., *Springfield*

AT THE OUTSET, we would like to offer the following newspaper notes, and we quote:

Springfield Daily News—"Old Timer" Column—June 13, 1931. "Springfield was a hospital center during the Civil War, but it had no regular hospital. Two battles were fought around here and both left wounded soldiers who had to be cared for. St. Paul's church at South and Walnut and the Court House on the Square and College were both seized and used as hospitals. When the war was over, both the church and the county collected rent from the government for use of the properties, although it took many years to do so. The Wilson Creek battle and the battle of Springfield swamped the city with wounded men. Facilities were poor, medical science crude and the suffering of the wounded men as told about by those who remembered those terrible days depict a story which is horrible to contemplate.

"St. John's Hospital is the oldest hospital in the city, starting in an humble way back in the 80's when a two-story residence at Chestnut and Washington was obtained by the Catholic sisters who came here from St. Louis. It was several years before enough money was raised to erect the present large structure. It was a great day when work actually started. Governor Joseph W. Folk laid the cornerstone and there was a large crowd present at the ceremonies."

The *Springfield Press,* Sunday Morning, August 14, 1932:

"The new addition (formally opened Monday, August 15, 1932) gives the Burge Hospital an 85-bed capacity and additional improvements planned will give it more than a 100-bed capacity, making it on a par with Springfield's largest hospital." (The Burge Hospital was originally a 35-bed hospital.)

These excerpts are interesting but do not give a complete picture of hospital growth in Springfield. Consequently, we shall in part recapitulate, and in part add to the information.

St. John's Hospital, starting in the 80's, progressed from a converted residence to a brick hospital with a capacity of fifty beds. It was opened in 1904. In 1924 the building program raised the capacity to 100 beds. During the Second World War further building made it possible to again increase the number of hospital beds. Then a courageous, extensive and intensive drive was carried out culminating in the present wonderful new 250-bed hospital, than which there is no finer in the country. The old hospital is now operated by the Sisters of Mercy as a Home for Old People. It is known as the Mercy Infirmary. New St. John's Hospital is architecturally most beautiful as well as scientifically planned and modern in equipment and management. It contains an approved and accredited School of Anesthesiology. In it is a large psychiatric ward—the only one in Springfield. It also houses our Heart Clinic. The Sisters of Mercy and the people of Springfield are to be congratulated for their vision, courage, hard work and achievement.

The Burge Hospital in 1925 contained 35 beds. An addition in 1932 increased the capacity to 85 beds. Then there followed since the Second World War a determined and likewise courageous drive which made possible our new Burge of 215 beds. It is a beautiful and comprehensive hospital—most modern and well planned and exceptionally well managed. Its equipment is most complete. For a number of years the Burge Hospital has had a separate unit for polio cases and also one for crippled children. It is a regional center for the care of both types of patients. The hospital operates an accredited training school for medical technicians. In the hospital there is a pediatrics section which works in cooperation with the Children's Hospital in St. Louis so that a resident in pediatrics is sent from St. Louis to the Burge in rotation each month. This works well for the Burge and makes it possible for the Children's Hospital to carry one more resident (one being away each month in Springfield). Our pediatricians have been outstanding among ourselves for their harmonious, unselfish vision in cooperating to obtaining advantages mutually beneficial.

In 1926 the maximum bed capacity of the City Hospital was 20 beds. It then occupied a converted residence building. Coincident with Burge's expansion a City Hospital was built, fitting into the Burge as an architectural unit. It was dedicated July 8, 1952, and has a capacity of 54 beds—so it with the Burge whose facilities it enjoys, have a combined capacity of 269 beds. Again the Burge Board, the City Council and Springfield's hard driving and generous citizens with vision and powers of execution are to be congratulated.

Springfield Baptist Hospital was opened January 1, 1905, with a capacity of 40 beds. Its capacity today is 100 beds. Like Burge and St. John's Hospitals, it is modern and complete in management and equipment and is famous for its nursing service.

Today we have 619 hospital beds in Springfield as versus about 313 in 1925.

In 1925 the Greene County Medical Society had 95 members. It grew slowly and progressively and fairly uniformly to 109 in 1948. Then there was a sudden leap to 128 in 1949, since when the growth has again been steady and progressive and quite uniform. Today we have 143 members.

In 1920 the population of Springfield was 39,631. In 1930 the census showed a large increase to 57,527. By 1940 we had reached 61,238. Again there was a sizeable increase and in 1950 our population stood at 72,109. Today the estimate is 81,000—and in addition there is a densely occupied zone of considerable depth lying around but not in the city.

So much for the growth of our city, its hospitals and the Greene County Medical Society.

At this point we wish to pay tribute to the United States Medical Center operated for federal prisoners with chronic illnesses. After an extensive survey the Department of Justice chose the Springfield site as the most healthy one in the country. The hospital occupies a 450-acre tract on the edge of Springfield. The institution was opened in 1933. There are 1,046 patient-inmates. The staff (supplied by the U. S. P. H.) includes 13 physicians, one psychologist, two dentists and one physiotherapist. The hospital and other buildings are attractive and the hospital most complete in all details with operating rooms, laboratories with six technicians for clinical work and research, hospital beds, a modern and complete psychiatric section and many other features. The only electro-encephelograph in Springfield at the present is at the U. S. Medical Center. It is available by arrangement for use on our patients. The Center has brought here a corps of fine doctors with whom we are in good rapport. A number of our local doctors serve as consultants to the Medical Center. We enjoy knowing the staff members on friendly terms and learn much from them, and we enjoy and profit from the occasional joint meetings which we have with them.

During the last war we had here the (U. S. Army) O'Reilly General Hospital—a large institution said to be the best military hospital in its day. The medical staff represented an assemblage from far and wide of men preeminent in their fields. We fraternized with them—made friendships and had occasional joint staff meetings. We learned much from them that is still with us today. As the O'Reilly staff members went, after the war, back to their various homes scattered all over the entire country, we hope that they carried with them a high regard for Springfield as a city of fine people and as a medical center. They left behind many friends in Springfield.

In Mount Vernon, thirty-five miles from springfield, there is situated the State Tuberculosis Sanitarium. There is none with a better record in the country. Its capacity at present is 650. Nine doctors and one dentist are on a full-time basis. A chest surgeon from Kansas City does their chest surgery. Many of Springfield's specialists are consultants in their respective fields.

In Springfield there are operated a tuberculosis clinic, a cancer clinic, a childrens' clinic, a mental health clinic and a school for retarded children. These activities draw on our membership for professional help and sometimes for management, and on the Community Chest for financial aid.

Thirty years ago medical practice in Springfield was not sharply divided into specialities. We had doctors doing a good share of their work in surgery, and they wished to be know as surgeons—although they did whatever they could in general medicine, pediatrics (and perhaps obstetrics), dermatology. There were, likewise, internists, and they—though not hewing exactly to the line—stuck to their last better than did the surgeons. We had one pediatrician and he limited his practice entirely to his specialty, although the general profession took care of easy pediatric cases, referring only the difficult, dangerous, disagreeable, or perhaps profitless cases to the pediatrician. The obstetricians were gynecologists and did considerable general practice and some general surgery, also pediatrics, not only for the babies and children whom they had delivered but also for other babies and children. We had one urologist and he had begun to limit at least 95 per cent of his practice to urology. Nevertheless, at this time general surgeons were doing prostatectomies and nephrectomies. Thirty years ago orthopedic surgery was not a speciality in Springfield, nor were dermatology, plastic surgery, rectal surgery, neuro-surgery, preventitive medicine, anesthesiology, psychiatry and neurology. However, a lone radiologist devoted his entire practice to his specialty, as did also a pathologist. "Eye, Ear, Nose and Throat" was a group specialty and was fairly well adhered to. However, the group had not yet been divided into what we have today as separate specialties. Men in general practice did also obstetrics, pediatrics and dabbled in surgery.

Thirty years ago the hospitals did not require tissue examination. If a surgeon desired this he himself paid our one local pathologist for his service and tissue diagnosis. The pathologist carried out his tissue work in his private laboratory, where he also did clinical pathology for the office practice of the profession at large.

At this time a young doctor starting practice here did not—unless under unusual circumstances—receive much active help from his confreres in building a practice. It was universally the order of the day and not personally malicious. At that the beginner received willing help and counsel if he needed and requested it. But in a general way it was felt that the longer time it took a new man to get started—just so much longer would the older men stay in the saddle.

At this time (thirty years ago) we had a leading internist with a different viewpoint. Dr. A. L. Anderson worked his way through a now defunct medical school. It was a difficult struggle to meet all his expenses and after graduation he had to forego an internship and take a position at a coal mine as the "company doctor." This he had to do to mend his financial fences. However, while he was the "company doctor," he purchased a microscope and a book on hematology. With the aid of this book he taught himself to do a complete blood examination, including the staining and counting incidental to a differential count. This is remarkable in itself and especially since hematology was then a new field. He read many hours, day and night and never forgot what he read or saw. When he came to Springfield he continued until shortly before his death to study for hours each day both patients and the literature. He became, in a short time, an outstanding internist. Despite his early lack of full opportunity he made up for the same and, in our opinion, was as able a diagnostician as we have ever encountered in medical schools or hospitals anywhere. He was brilliant and yet safe. He was generous and big-hearted and had great vision. When young men came to Springfield to practice he generously sent them cases—cases that he could have taken care of himself—and he continued to do what he could to enhance the young men's development of practice, and also ability. When a new man came attempting a specialty or someone already here "took a course" and started specializing, he sorted out appropriate cases and sent them to him. Moreover, he gave encouragement and let it be generally known that a capable new specialist had arrived in Springfield. And with all this he himself kept as busy as ever—although he continued his kindly generous attitude for years. He sowed the seeds for our present day status as a medical center—and for our harmonious cooperation with each other.

The standardization of hospitals by the American College of Surgeons caused many changes. The hospitals thereafter had departments of pathology with tissue examination required—tissue committees and strict rules for records (history, physical examination and progress notes). This made for much improvement in the care of patients and the interrelationship of doctors. Later, the formation of the College of Physicians brought about further general improvements as has also more lately the Academy of General Practice. It would be useless and nostalgic to discuss the various frontiers of surgery and medicine that have been encountered and conquered by our profession in the last thirty years. Nor need we discuss the improvements in old surgical technics and methods of medical examination and treatment, including the "wonder drugs" and advances in blood chemistry.

Everywhere in our country we have benefited tremendously in the last thirty years from medical research and general scientific and industrial research. Be it said, however, that we in Springfield have been quick to seize upon new but tried methods and ideas in all branches of medical diagnosis and treatment, surgery and preventitive medicine.

The spirit of our local group—thanks to Dr. Anderson—is such that good new men are welcome here and we want them to succeed. Licentiates of the Specialty Boards have come here in large number, attracted by our fine city and encouraged by our local society's attitude. We doubt if any city in the country can boast of as many "Board Men" per thousand of population. And good, well-trained men keep on coming here to locate. This has built Springfield as a medical center and is continuing to do so. It may seem strange to some, but the addition of good men to our local society is a benefit to all of us as well as to the community. How long this can continue one cannot tell. It will be regulated by natural laws of supply and demand. Only when further demand for medical and surgical care cannot be stimulated or attracted here will an optimum be reached. And that is a long way off. Good new doctors shall always be welcomed here in Springfield. Cardiac surgery is today the only specialty in medicine or surgery that cannot be competently handled here.

With this spirit has arisen a feeling of friendly cooperation among ourselves.

One of the important steps taken by our Greene County Society was the hiring of a full-time executive secretary and renting a suite of office rooms for him and his secretary. We were fortunate when four years ago Mr. Delbert E. Caywood accepted this position. He was a "natural" for the job and took hold of things at the start. He did much in his four years of tenure to improve public relations and increase our stature. Two years ago he resigned to become City Health Commissioner and was succeeded as our secretary by Mr. John Buckner, who has likewise been capable and hard-working. He supplied us with the historical data and statistics included in this short history.

We have tried hard to be of value and service to our State Association and have men on many important committees. The late Dr. Wallis Smith exemplified our spirit. We enjoy having headquarters at the State Meetings—with open house and hospitality for all.

Come and visit us at the next meeting.

BOOK REVIEW

RECONSTRUCTIVE SURGERY OF THE EYELIDS, by Wendell L. Hughes, M.D., Hempstead, New York. With 268 Illustrations. Second Edition. C. V. Mosby Company, St. Louis. 1954. Price $8.50.

The first few chapters are spent in presenting the historical aspects of skin grafting. The various types of skin grafts and pedicle flaps are discussed. General consideration, regarding elementary factors concerned with skin grafting such as donor sites, anesthesia, dressings and the technic of procuring grafts are explained. Cases are presented to demonstrate reconstruction of the conjunctiva, tarsus, cilia, upper eyelid and both lids. The drawings and photographs explain clearly the technics described. F. X. P.

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Among Ourselves

(Editorially Speaking)

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Missouri Medicine Features Springfield Medical Writers

For the second time this year, Missouri Medicine is proud to honor medical writers of one community. In our May copy, the contributions of Columbia writers were featured, almost coincident with the establishment of a four-year medical school.

Among Missouri cities of secondary population, Springfield undoubtedly has attracted an inordinately large number of young, well trained physicians to complement the excellent corps of outstanding, throughly established, older physicians. Probably in no other comparable locality has the influx of post-war medics topped this beautiful Greene County center.

Springfield has stood, for many years, as a great economic, educational, agricultural, cultural and recreational hub of the Ozark region. It is the largest urban area within approximately a 200 mile radius. Its health facilities (in the broadest sense) literally have mushroomed since World War II. Her hospital bed-space has kept pace with the growing population, both of her physicians and of her citizens. Her public health department has expanded its activities, patterned after similar projects in the larger medical centers.

It is only fitting that Missouri Medicine should thus feature the Springfield physicians. They are friendly, aggressive, scientifically superior, aware of and doing something about their civic responsibilities—altogether a fine medical community which richly deserves and merits this recognition!

Vincent T. Williams, M.D.

"Cross Over the Bridge"

Time was when a young doctor about to enter practice in a town needed only his saddle bags, his horse and, of course, an office—some little frame building with just a waiting room and stove and an examining room. As time has gone on and as medical science has progressed a doctor's needs for practicing have come to greatly exceed these—what seem to us now primitive necessities. This increase in the progress of medicine has been slow and not abrupt. In some ways it would have been better if it had been abrupt—because then localities would have been jolted into realizing what was going on. However, the progress has been gradual—ever making it more undesirable, indeed, more impossible for a beginning doctor to start up in a locality with no hospital or clinical facilities. And all the time we, the medical profession, have been putting on the screws of preparation and time of preparation—almost beating the whole program into the ground. This makes ever and ever for a prohibitive gap between young well trained doctors and their beginning where there are no facilities.

It would seem that there are two factors to blame for the shortage of medical doctors in rural areas—one, the increasingly great requirements in the way of preparation; two, the failure of localities to furnish attractive facilities to young doctors. One can hardly blame the medical profession for turning out better and better qualified trainees—although there is some muttering that the system is conducive to free and, at the same time, highly trained help. Perhaps we should pause and survey what we are doing. As to the rural communities—they have been asleep at the switch, calloused or indifferent, or else they refuse to care a tinker's dam. Certainly a community cannot expect a young doctor after five years of training following graduation to come into their midst and erect a hospital or a building with satisfactory clinical facilities. This would require not only a finely trained doctor but also a lavish philanthropist.

The point we wish to make is that in two states, agencies have, on a state-wide basis, wakened small town and areas to what is possible. A community is told: furnish desirable facilities and you shall have a good doctor. It works out every time. This has been going on on a state-wide basis in Kansas and Virginia. It has worked out sporadically in other states. The lesson seems clear—the doctor furnishes his training (four years in college, four in medical school and up to five in postgraduate training). The locality furnishes the necessary facilities and has a doctor or doctors at their service with satisfactory training and facilities for work. There is no further chance for griping—except from those like an individual we encountered during a hospital drive for money. "Hell," he said, "I don't ask the public to erect and equip my garage. Why should I donate to give a bunch of doctors a work place?"—and this man, having grown filthy rich with an automobile agency. Well, in his case, he and his men alone can use his garage, whereas in a hospital many can work—but, hell, what's the use of paying attention to one selfish crab. You can't take it with you—and if you could it would be too bad, because paper burns so easily.

F. T. H'Doubler, M.D.

Standardization of Surgical Fees

In labor's negotiations with industry for increased benefits, medical care and hospitalization seem to be its one paramount objective. Of all its demands this is the one most easily obtained by labor. As a result, insurance coverage for medical and hospital care is either paid for in full by the employer, or the cost is divided between labor and management. So far, so good.

Now labor demands full coverage for physicians' services. Charges have been made by labor leaders that doctors "up" their fees in insurance coverage cases. They, above all, infer that physicians are racketeering. Do you read the daily papers? Strange that these accusations should come from men who demand time and a half for overtime and double time on Saturdays and Sundays with a forty hour week. Strange that they demand a standardization of surgical fees whether an operation be done at three o'clock in the morning or on Saturday or Sunday by a surgeon on call every hour of the week. Would these same labor leaders contract to build a house for a standard fee regardless of its size or structure? Similar appearing cases in surgery require varying degrees of skill and postoperative care. Complications of disease can be no more standardized than can the ravages of war. Their care requires time and time is an element of value to the surgeon as well as to anyone else. Standardization of surgical fees is out of the question and is not the solution to this problem.

The truth is that most insurance coverages are minimal in regard to surgeon's fees because their cost is not based on full risk. Good full coverage can be obtained at a price which is commensurate with the risk. You get only what you pay for in insurance; pay more and you get more.

Martyn Schattyn, M.D.

Inguinal Hernia in Infants and Small Children

Too often physicians dismiss the anxious parents whose child has an inguinal hernia, with, "Wait until he is a little older," vaguely hoping perhaps it will disappear. Actually, surgical texts are quite limited in their treatment of this subject; past surgical treatment has been equally indefinite. Thus the medical profession has adopted a vacillating attitude on this problem.

Willis J. Potts (Ann. Surg. 1950) covers his technic and end results of inguinal hernias operated on at Children's Memorial Hospital, Chicago. He pleaded for operation upon diagnosis, providing the child was otherwise normal; he simply obliterated the hernial sac neck through a small incision over the internal inguinal ring; 19 per cent of his cases were strangulated. Potts feels that hydrocele is almost invariably due to a patent processus vaginalis, a potential inguinal hernia. These are frequently aspirated with a hope they will not refill. Potts calls this a vain hope since they refill almost immediately; many will refill during the day when the child is up and disappear at night. In Potts' experience, spontaneous cure is, for all practical purposes, a myth; surgical correction is required.

Cresson (M. Clin. N. Am. 1952) reviewed the management of hernias in children and echoed the basic concepts presented by Potts.

We are pleased with our experience, following the proposals of Potts, using his technic in the repair of fifteen inguinal hernias in infants and children; six less than 1 year of age, the earliest a strangulated inguinal hernia at 3 weeks of age. All of them are essentially outpatient procedures, the patient enters early the morning of operation and is dismissed that evening. The infants have only water by mouth three hours prior to surgery

(Continued on page 944)

Fraternally Yours

One More Complaint Satisfied?

The barrage of criticism which has all but inundated the medical profession for the last two decades has included such heavy salvos as: "Not enough doctors" and the more sinister allegation "The doctors keep down the number of new doctors who are graduating, so as to limit competition."

Obviously, the first criticism stems from those who have found it hard to get a physician for night calls or house calls. Potentiating this personal disgruntlement is the everyday observation that there is, and has been, a maldistribution of physicians. For instance, a heavily populated area may have one physician for a few hundred, whereas a less congested area may have only one physician for several thousand citizens. The latter condition, moreover, usually is sparsely settled areas which mean that communication and transportation problems make matters worse. Of course, the second quote is merely a smooth sophistry, a lie. The practicing physicians in the United States have little or nothing to say about who gets into medical schools, how many graduate each year, or what they study. Perhaps these young graduates (and the whole medical profession) would be infinitely better off *if practicing physicians* did have something to say about these matters!

But now comes the real dope on this "doctor ratio" business. During the last year the ratio or physicians to population has reached a record, one physician for every 730 persons in the United States. This ratio will be lowered in the next few years because the record of 6,861 physicians in the 1953-54 crop will be exceeded in the next and succeeding years.

There will be 7,449 freshmen in the total of 28,227 medical students this year, the greatest number of medical students in history. Ten new four-year medical schools will be opened within the next few years, and despite all the detractors, no one can honestly charge that the medical profession is holding back in this matter.

It is apparent that this phase of the problem is rapidly being solved, and we can only hope the second phase, maldistribution, will follow in due course.

" 'Tain't Funny!"

Everyone remembers the old wheeze about the good old family doctor who was stumped on a case and finally blurted out to the patient's mother, "Well, Mrs. Jones, I don't know what's the matter with little Willie, but I'll give him some of this stuff and that'll make him have fits . . . and I'm just hell on fits!"

We can't help but think of that story when we read and hear about some of the serious, untoward effects of the "miracle drugs." A big internationally known clinic reports several deaths, one a simple bunion case, which died after surgery wherein the patient had been receiving some adrenal-like substance previously. A famous patient in these parts damn near dittoed from antibiotics! One famous (and worthy) antibiotic almost went off the market but is beating its way back in the medical-public's esteem. And, speaking of the "new things in medicine" which backfire, does anyone ever hear of vagotomy anymore?

Let's Do Our Part

In a recent copy of Missouri Medicine, an appeal for contributions was made by the State Chairman of the American Medical Education Foundation, James P. Murphy, M.D., St. Louis. We would like to put in our two-bits worth; we think it is worthy of your investigation, and believe if you'll investigate you'll contribute.

You will recall the A.M.E.F. was set up several years ago so that physicians could help the medical schools remain free and solvent and, to date, the results have been excellent. Contributions are income-tax deductible; every penny goes to the medical school of your choice (if so indicated); and none of the money is used for administrative purposes or for fund-raising, every penny goes to the schools (all administrative charges are paid by the A.M.A.).

Some states, such as Arizona, sent in their check representing ten dollars per member increased dues, following the plan of Illinois State Medical Association. However, Illinois, for the second straight year, still leads the nation with a whopping $163,120. California sent in $100,000 from the California Medical Association, plus $17,230 from 255 individual California physicians.

The first physician known to have put a provision in his will for A.M.E.F., is the late Andrew McGraw, M.D., of Detroit, who bequeathed $5,000.

Reports from over the country indicate the

(Continued on page 944)

Missouri Medical Meetings

Southern Medical Association, St. Louis, November 8-11, 1954.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Societies (Howell-Oregon-Texas-Wright-Douglas-Ozark)—third Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

We invite your special attention to page 938 of this issue. Each 100 years deserves its just dues. Your presence at this celebration will be noted and appreciated, as well as being fruitful to you.

One hundred doctors, coming from Illinois, Kentucky and Missouri congregated in Cape Girardeau on Thursday, September 30, to put over the first Southeast Missouri Cancer Conference. A full afternoon and evening cancer program, with the proper social trimmings, apparently struck the fancy of the one hundred recipients as exemplified by a quote from a recent letter of a doctor in attendance: "I feel that this was one of the best conferences I have attended in a long time, and I certainly hope that it can be converted into an annual affair." The conference was sponsored jointly by the Cape Girardeau County Medical Society, the Missouri Division of the American Cancer Society, the Tenth Councilor District of the Missouri State Medical Association and the Missouri Academy of General Practice.

Representatives of the Committee on Infant and Child Care met in conference on school health.

The Infant and Child Care Committee of the Missouri State Medical Association called a small, exploratory meeting on "School Health Problems" at Jefferson City, on Thursday, September 23.

(Continued on page 948)

Members in the News

Cape Girardeau's Medical Arts Building has been completed and occupied. Included among occupants are Doctors **E. D. Campbell, J. T. Crowe, J. A. Kinder, H. B. Rapp, H. D. Ridings, M. Shoss,** and **C. E. Sutton.**

Carroll P. Hungate, M.D., Kansas City, spoke to the International Association of Police Chiefs in New Orleans on "Civil Defense—a Personal Problem for the Peace Officer."

Kansas City pathologist **Loraine E. Schultz,** M.D., left in early fall for a three months tour of Europe.

Hannibal's St. Elizabeth hospital has begun construction on a seventy-five bed wing. Also included in the current building program is an extensive remodeling program over most of the hospital.

Iowa University graduate Ralph DeCicco, M.D., has begun practice in Mountain View. Prior to this move Dr. DeCicco had practiced in Shenandoah, Iowa.

After a four year absence, T. M. Turner, M.D., has returned to Centralia where he has resumed practice. Dr. Turner practiced in Centralia from 1934 until 1950.

Construction on the Cardinal Glennon Memorial Hospital, St. Louis, is progressing satisfactorily. The hospital, which is scheduled to open in the fall of 1955, represents an expenditure of nearly $6 million.

William J. Shaw, M.D., Missouri Medicine contributor, Fayette, was reported in early fall to be making slow progress following a heart attack in late summer.

Attendants at the International Congress of Cardiology in Washington heard **F. Stanley Morest,** M.D., Kansas City, speak on "Atypical Coronary Occlusions" and "Treatment of Ischemic Ulcers of the Extremities."

The Missouri Association of Chiropodists heard **Philip Sneid,** M.D., Kansas City, speak on "Keratotic Lesions and Tumors of the Foot."

After a year of practice in Poplar Bluff, **Richard Comeau,** M.D., has moved to Dexter, where he has joined the staff of Dr. **Sam Davis** Hospital.

Kansas City psychiatrist **Marvin Bills,** M.D., **Paul Hines,** M.D., and **John D. DeMott,** M.D., attended the meeting of the Mid-Continent Psychiatric Association in Little Rock.

At the Kansas City Law School, **Marcus B. Bond,** M.D., and **Adrian J. Brown,** M.D., spoke on and demonstrated "Traumatic Injuries of the Thorax and Thoracic Vertebrae."

Charles A. Worley, M.D., Sweet Springs, was injured in a car wreck in Kansas City in late summer.

Recently discharged from military service, ophthalmologist **George E. Padfield, Jr.,** M.D., has opened offices in Kansas City.

At the Nineteenth Annual Convocation of the International College of Surgeons in Chicago, several MoMedics were inducted as Fellows: from St. Louis, **Durand Benjamin,** M.D., **Samuel J. Freund** M.D., **Earl A. Powell,** M.D., **Mary Jane Skeffington,** M.D., **Alvin Goldfarb,** M.D., and **William L. Macon, Jr.,** M.D.; from Kansas City, **Hjalmar E. Carlson,** M.D., **Frederick J. McCoy,** M.D., **William B. McCunniff,** M.D., **John H. Mayer,** M.D.; and from Dickens, **Thomas C. McVeagh,** M.D.

The freshman class of the University of Kansas Medical School, Lawrence, heard **Ralph S. Casford,** M.D., Kansas City, speak on "The Basic Sciences in the Practice of Medicine."

MoMedics were much in evidence at the September meeting of the Mississippi Valley Medical Society meeting, held in Chicago. Participating in the meeting, from St. Louis, were **James Barrett Brown,** M.D., **O. P. J. Falk,** M.D., **Joseph A. Hardy,** M.D., **Alphonse McMahon,** M.D., and **Robert Elman,** M.D.; from Kansas City, **Robert M. Myers,** M.D., and from Columbia, **Robert L. Jackson,** M.D. M.S.M.A. President **H. E. Petersen,** M.D., St. Joseph, was an honored guest at a banquet held at the Hotel Sherman.

At the American Medical Writers' Association meeting, also held in Chicago, Earl English, Ph.D., Professor of Journalism at M. U., and **Roscoe L. Pullen,** M.D., Dean of Medicine, spoke on the new medical journalism courses at M. U. **Sidney W. Scorse,** M.D., Joplin, spoke on "Medical Writing and Medical Records." Dr. Scorse is editor of the *Tri-States Medical Bulletin.*

A feature story by Conwell Carlson in the *Kansas City Star* described the presentation of a plaque to **George Kelling,** M.D., Waverly. Also in the same article was a description of outstanding medical

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Robert W. Butcher, M.D., has opened suburban offices in Kansas City for the practice of medicine.

The St. Louis Ophthalmological Society officers, recently elected are: President, **Robert Dean Mattis**, M.D., Vice-president, **S. Albert Hanser**, M.D., Secretary, **Anton J. Hummel**, M.D., and Treasurer, **Thaddeus Szewczyk**, M.D.

Paul Wolff, M.D., Cape Girardeau, attended the American Academy of Ophthalmology and Otolaryngology in New York.

Psychiatrist Richard F. Schneider, M.D., has opened offices in Kansas City.

In ceremonies held in front of the clinic he built in 1938, **George A. Kelling**, M.D., Waverly, was honored for the forty-seven years he had spent in practice there. Nearly 500 persons saw Dr. Kelling receive a plaque from the community ". . . in appreciation of the forty-seven years of tireless endeavor in the practice of his profession and never-ending interest in the progress of the community development." It was pointed out that Dr. Kelling's service to the community, aside from the practice of medicine, included serving as mayor and a member of the city council.

At the Muehlebach Hotel, Kansas City, St. Louis County representative A. Clifford Jones told attendants at the Mid-West regional convention of the United Cerebral Palsy Association that the outlook for enacting legislation aimed at helping the handicapped is favorable.

Mexico physician **Thomas L. Dwyer**, M.D., left New York in mid-September for Europe. He spoke in Barcelona in October on "Posterior Mediastinal Malignant Tumors" at the International College of Chest Physicians.

Ex-Kansas University football and basketball star, now a Kansas City orthopedist, **Harold V. Zuber**, M.D., was the subject of Sam Molen's "Sport Profile" over KMBC in that city.

The sixteenth annual convention of the National Association of Medical-Dental bureaus met in early fall in Kansas City. Speakers included **James R. McVay**, M.D.

Arrangements have been made for the Missouri University School of Medicine to present a series of Postgraduate Courses in Springfield. The sessions, the first of which was held October 20, are to be at Burge Hospital the third Wednesday of each month.

The September 1 issue of *Modern Medicine* featured on its cover a portrait of **William A. Sodeman**, M.D., Professor of Medicine at the University of Missouri.

At the Southwestern Surgical Congress held in Oklahoma City, Kansas City surgeon **Lawrence P. Engel**, M.D., was installed as President. At the same meeting, **George A. Higgins, Jr.**, M.D., Kansas City, presented a paper on "Polypoid Lesions of the Stomach." From Clayton, **Roland W. Stuebner**, M.D., presented a paper on "The Problem of Therapy in Varicose Veins of the Lower Extremities." **Robert Dean Woolsey**, M.D., St. Louis, spoke on "Surgical Decompression of the Gasserian Ganglion and the Posterior Root of the Trigeminal Nerve in the Treatment of Trigeminal Neuralgia." Also participating in discussions or acting as moderators were **John H. Mayer**, M.D., and **Eugene Parsons**, M.D., both of Kansas City.

At Kansas City General Hospital, the 1953-54 Outstanding Resident award was given to Max Musgrave, M.D., and Outstanding Intern awards were given to Richard Bowles, M.D., Dale Blankenship, M.D., and Bob Collins, M.D. Dr. Musgrave is editor of the General Hospital No. 1 *Medical Bulletin*, and one of the founders of the better-than-average hospital journals which made its appearance early in 1954.

John D. Maddox, M.D., Joplin, has recovered from a recent illness and is again back in active practice.

Noted in the *Tri-State Medical Bulletin:* in the past year Eastern Jasper County lost three M.D.'s by death. Only one physician, **Richard R. Cohle**, M.D., has opened a practice, leaving a net deficit of two physicians.

Returning to Kansas City after a three-month vacation in Europe, Dr. and Mrs. **Edwin H. Schorer** were in a Santa Fe train wreck at Lomax, Illinois. The physician was commended for his aid in treating the injured at the wreck.

Via Manila, Okinawa, Tokyo, the Aleutians, Seattle, Los Angeles to Kansas City, five year old Freddie Florendo traveled alone to be reunited with his parents in Kansas City. His father, Dr. Frederico Florendo, is a resident in surgery at Children's Mercy Hospital, and his mother, Dr. Puring Florendo, is taking further training in obstetrics at St. Luke's Hospital. The child is one of the youngest passengers ever to make the trip.

On the heels of recently completed additions to Burge Hospital, Springfield, amounting to $1½ million, construction is scheduled to start on another million dollar-plus addition. The new addition will house a crippled children's building and a nurses' section.

The first rehearsal and meeting of the St. Louis Physician's Orchestra was held at the home of **Walter J. Siebert**, M.D., Ladue, in September.

Recently associated with the Army Institute of Pathology, Edward B. Price, Jr., M.D., has left Kansas City to go to Washington, D. C., after being certified by the American Board of Pathology.

Ophthalmologist Henry B. Ivy, M.D., has been discharged from military service and has associated with **C. Souter Smith**, M.D., in Springfield.

Kansas City Children's Convalescent Center officers, recently elected, are **Gerald E. Hughes**, M.D., **Roy F. Garrison**, M.D., and **Edward H. Fischer**, M.D.

At the Springfield Medical Center, Dr. Warren P. Jurgensen has joined the staff. The Traverse City, Michigan, physician was formerly on the staff of the state hospital in that city.

After a year as acting administrator, William B. Schaffrath, Ph.D., has been appointed administrator of Kansas City Menorah Medical Center.

At Bothwell Hospital, Sedalia, members of the Henry, Johnson, Pettis, Saline and adjacent county medical societies heard two Kansas City physicians speak. **Hector W. Benoit, Jr.**, M.D., spoke on "Recent Advances in Thoracic Surgery," and **Lawrence E. Wood**, M.D., spoke on "Recent Trends in the Therapy of Pulmonary Tuberculosis."

Bothwell Hospital, Sedalia, has installed Tel-EKG equipment. The long distance EKG system is utilizing the facilities of a Kansas City laboratory for interpretations of the tracing.

Sedalia physicians have made themselves available for emergency calls from the Sedalia Air Force Base. Plans are also under consideration for local obstetric care of Air Force dependents, thus avoiding the necessity for transportation to the nearest military post, Ft. Leavenworth.

In attendance at the Pacific Dermatological Society at Colorado Springs recently was **James C. Sisk**, M.D., Clayton.

Officers elected by the American Psychiatric Association meeting at Little Rock September 18 and 19 included **Paul Hines**, M.D., Kansas City, president, and **G. Wilse Robinson, Jr.**, M.D., Kansas City, councilor for Missouri.

IN MEMORIAM

Hooss, Albert, M.D., Clayton, a graduate of Washington University School of Medicine, 1905; member of the St. Louis Medical Society; aged 73; died July 9.

Gillham, Frank W., M.D., Jefferson City, a graduate of the Homeopathic Medical College of Missouri, 1899; honor member of the Cole County Medical Society; aged 78; died August 31.

Cook, James T., M.D., St. Louis, a graduate of National University of Arts and Sciences, 1917; member of the St. Louis Medical Society; aged 61; died September 2.

Walther, Roy A., M.D., Overland, a graduate of the National University of Arts and Sciences, 1917; member of the St. Louis County Medical Society; aged 63; died September 6.

Etzenhouser, Russell D., M.D., Independence, a graduate of the University of Kansas School of Medicine, 1931; member of the Jackson County Medical Society; aged 54; died September 12.

Spaulding, William, M.D., Poplar Bluff, a graduate of Indiana Medical College, 1906; member of the Butler-Ripley-Wayne County Medical Society; aged 73; died September 16.

Shirley, George H., M.D., Eugene, graduate of American Medical College, 1911; member of the Cole County Medical Society; aged 66; died September 20.

Underwood, Johnson, M.D., Parkville, a graduate of the Kansas City Medical College, 1891; honor member of the Platte County Medical Society; aged 90; died September 22.

Scholz, Roy P., M.D., St. Louis, a graduate of Washington University School of Medicine, 1894; honor member of the St. Louis Medical Society; aged 75; died September 24.

Huber, Melvin J., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1933; member of the St. Louis Medical Society; aged 45; died September 26.

Sanford, Joseph Hoy, M.D., St. Louis, a graduate of Tulane University of Louisiana School of Medicine, 1908; honor member of the St. Louis Medical Society; aged 70; died September 26.

Buddy, Edward P., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1910; honor member of the St. Louis Medical Society; aged 72; died October 5.

NEW MEMBERS

Casady, Gilbert N., M.D., Smithville
Fowler, Marvin L., M.D., West Plains
Gary, George, M.D., Marceline
Weed, Randal W., M.D., St. Joseph
Winer, Herbert J., M.D., Kansas City

CLAY COUNTY CLINICAL CONFERENCE AND 100TH ANNIVERSARY OBSERVANCE

November 4, 1954

10:00 a.m. Registration, Elms Hotel
12:15 p.m. Luncheon, Club Room
Glenn W. Hendren, M.D., Presiding
Chairman, Clinical Conference Committee
Panel Discussion. Subject: Our Government—Our Profession
Participants: Drs. Paul R. Hawley, W. Palmer Dearing, William Hildebrand and Thomas H. Alphin
Moderator: Roscoe Pullen, M.D., Dean of the School of Medicine, University of Missouri
2:00 p.m. I. Charles Fowler, M.D., Presiding
Introduction of Speaker by Mr. Mac F. Cahal, Executive Secretary, American Academy of General Practice
Subject: Mass Inoculation in Industry With Influenzal Virus Vaccine
William B. Hildebrand, M.D., President, American Academy of General Practice, Menasha, Wisconsin
3:00 p.m. Elmer E. Gay, M.D., Presiding
Introduction of Speaker by James R. Amos, M.D., Director, Division of Health, State of Missouri
Subject: The Challenge of Preventive Medicine
W. Palmer Dearing, M.D., Deputy Surgeon General, Department of Health, Education and Welfare, Public Health Service, Washington, D. C.
3:45 p.m. Intermission
4:00 p.m. Arch E. Spelman, M.D., Presiding
Introduction of Speaker by Thomas G. Orr., M.D., Professor of Surgery, University of Kansas School of Medicine
Subject: Ethics Within the Profession
Paul R. Hawley, M.D., Director, American College of Surgeons, Chicago, Illinois
5:30 p.m. Social Hour
6:30 p.m. Dinner, Ball Room
With the members of the Clay County Medical Society, the Auxiliary and Guests
Robert H. Parker, M.D., Presiding
President, Clay County Medical Society
Toast: The Centennial of the Clay County Medical Society
W. A. Sodeman, M.D., Professor and Chairman, Department of Medicine, University of Missouri School of Medicine
Introduction of Distinguished Guests
E. C. Robichaux, M.D.
8:00 p.m. Eugene B. Robichaux, M.D., Presiding
Introduction of Speaker by Ralph H. Major, M.D., Professor Emeritus, Department of Medicine, University of Kansas School of Medicine
Subject: Our Heritage Is Our Responsibility
Thomas H. Alphin, M.D., Assistant Director, Washington Office, American Medical Association

Program of Woman's Auxiliary

10:00-12:00 Registration and Coffee, Rip Van Winkle Room, Elms Hotel
12:30 p.m.-1:30 p.m. Luncheon, Balcony Room

Reservations to be made in advance to Mrs. J. E. McCormick, 309 Northcrest Drive, Kansas City 16, Mo. Phone: Gladstone 1203.

(Continued to page 948)

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Tel: Joplin 6262

KANSAS CITY
Southwestern Hearing Aid Service
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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Grand River Medical Society

The Grand River Medical Society held a dinner meeting on September 9 at the Strand Hotel in Chillicothe. There were forty-eight present including doctors, members of the Woman's Auxiliary and guests.

Following the reading and approval of the minutes of the last meeting, Dr. **George Gary**, Marceline, was elected to membership in the society.

The scientific program for the evening was presented by Dr. **Graham Asher**, Kansas City, who discussed "This Matter of Hypertension." His was a fine scientific presentation of an interesting subject. A lively discussion followed Dr. Asher's formal talk.

E. A. DUFFY, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The regular meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held on Thursday night, September 9, at the Woodland Hospital in Moberly.

Following dinner at 6:30 p.m. Dr. C. W. Erickson of Pittsburg, Kansas, President of the Kansas Heart Association, spoke on "Common Cardiac Emergencies."

W. D. CHUTE, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, CLAYTON, COUNCILOR

Lincoln-St. Charles County Medical Society

On Tuesday night, September 21, the Lincoln-St. Charles County Medical Society held an important dinner meeting at the Southern Air in Wentzville. The members' wives were also in attendance as well as a number of guests from the St. Louis County Medical Society and its Woman's Auxiliary.

Following the pleasant and refreshing social hour, the forty-seven persons present were privileged to hear Dr. **Roscoe L. Pullen**, Dean of the Medical School of the University of Missouri, discuss the "New Four-Year State Medical School and Its Development Progress." Dr. Pullen's discussion was interesting and quite informative. He stated that barring unforeseen circumstances, the new Medical School expects to begin the third year class for medical students in September of 1955. Those present were pleased with the opportunity to meet personally Dr. and Mrs. Pullen on this occasion.

Mrs. Charles T. Shepard of Clayton, First Vice President of the Woman's Auxiliary to the Missouri State Medical Association, spoke on the activities of the Woman's Auxiliary and expressed her hopefulness toward the organization of an Auxiliary to the Lincoln-St. Charles County Medical Society.

J. C. CREECH, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

J. LOREN WASHBURN, VERSAILLES, COUNCILOR

On September 16, the Callaway County Medical Society was host to the Fifth Councilor District of the Missouri State Medical Association at the Fulton Country Club. Fifty-seven physicians and guests from the twelve county area were present including Dr. **J. Loren Washburn**, District Councilor; three past presidents of the Missouri State Medical Association, Drs. **W. L. Allee**, **W. A. Bloom** and **A. S. Bristow**; Dr. **R. L. Pullen**, Dean of the new Missouri Medical School at Columbia; the Missouri State Field Secretary, Mr. Ray McIntyre, and Mr. T. R. O'Brien, the State Association's Executive Secretary.

At 6:00 p.m. a social and fellowship hour was held on the large porch of the Club. At 7:30 p.m. "Nannie called 'Dinner for all.'"

After the dinner Dr. **Andy Lanier**, President of the Callaway County Medical Society, turned the meeting over to Dr. Washburn, who introduced Dr. **David McClure** and Dr. **Heinz Haffner**, the speakers of the evening, who are on the staff of the St. Louis Chidren's Hospital. Dr. McClure discussed "The Management of Medical Emergencies in Pediatrics." Dr. Haffner discussed "The Management of Surgical Emergencies in Pediatrics." Due to the lateness of the hour his address was abbreviated. They presented many new phases in the treatment of the newborn.

R. N. CREWS, M.D., *Secretary*

Postgraduate Course at Missouri University

The first in a series of six fall and winter postgraduate meetings for central Missouri physicians, sponsored by the Missouri Academy of General Practice and the faculty of the University of Missouri Medical School, was held at the University on Thursday evening, September 23. Sixty-five physicians and guests were in attendance to hear the two scientific presentations of the evening given by Dr. **William A. Sodeman**, Professor of Medicine on "Atherosclerosis," and Dr. **Clarence D. Davis**, Professor of Obstetrics and Gynecology, on "Treatment of Threatened and Recurrent Abortion."

Members of the Missouri Academy of General Practice who attend these postgraduate sessions at the University are entitled to two hours per session of formal credit toward Academy membership requirements.

The next session will be held at the University on Thursday night, November 18, and will present Dr. **Robert L. Jackson**, Professor of Pediatrics, on "The Diabetic Child," and Dr. **Claude K. Leeper**, Associate Professor of Pathology, on "Cat Scratch Fever and the Newer Virus Diseases." All of these sessions begin promptly at 8:00 p.m. and close at 10:00 p.m. or shortly thereafter.

SIXTH COUNCILOR DISTRICT

C. G. STAUFFACHER, SEDALIA, COUNCILOR

Benton, Henry, Johnson, Pettis and Saline County Medical Societies

Forty doctors and guests attended a joint dinner meeting of the Benton, Henry, Johnson, Pettis and

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Saline County Medical Societies Wednesday night, September 22, at the Bothwell Hospital, Sedalia. The evening festivities began with a social hour, followed by dinner and then the scientific program consisting of a panel discussion on "Chest Diseases."

The moderator of the panel was **Paul Murphy**, M.D., St. Louis, Chairman, Committee on Tuberculosis, Missouri State Medical Association; participants were **Herbert C. Sweet**, M.D., Director of Pulmonary Function Laboratory, St. Louis University Medical School, "Pulmonary Function"; **Hector W. Benoit, Jr.**, M.D., thoracic surgeon, Kansas City, "Recent Advances in Thoracic Surgery"; **John Wyatt, M.D.**, Professor of Pathology, St. Louis University Medical School, "Some Recent New Concepts in Pulmonary Pathology"; and **Lawrence Wood**, M.D., Kansas City, President, Missouri Trudeau Society, "Recent Trends in the Therapy of Pulmonary Tuberculosis."

CARL D. SIEGEL, M.D., *Secretary,*
Pettis County Medical Society

EIGHTH COUNCILOR DISTRICT

W. S. SEWELL, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

The Ozarks Medical Society held its opening fall meeting at Neosho on Tuesday night, September 14. The physicians, who became officially hyphenated on September 1 into the Ozarks Society, served as hosts. Many of the doctors' wives attended this meeting and enjoyed the fine dinner and interesting program.

Dr. Kenneth Mapletoft, of Camp Crowder, spoke on "Rehabilitation and Disciplinary Procedures at Fort Crowder from the Medical and Psychiatric Point of View." The attendance at this meeting numbered forty-six including doctors, their wives and guests.

Dr. **Walter S. Sewell**, Springfield, Councilor of the District, and Mr. Ray McIntyre, Field Secretary of the State Medical Association were present and both discussed matters of interest to the Society.

CHARLES A. SPEARS, M.D., *Secretary*

West Central Missouri Medical Society

The West Central Missouri Medical Society and its Woman's Auxiliary held a dinner meeting on Thursday evening, September 9, at the Mitchell Hotel in Nevada. Following an enjoyable social hour a special steak dinner was served, the combination of which produced just the right atmosphere for the scientific program. The forty persons in attendance were privileged to hear two interesting and informative scientific discussions.

John S. Knight, M.D., of Kansas City, spoke on "The Management of Some Common Ear, Nose and Throat Conditions," and **William W. Gist**, M.D., of Kansas City, discussed "Surgical Management of Varicose Veins and the Complications."

It was decided to cancel the regular monthly meeting of the Society for October in lieu of the Kansas City Southwest Clinics and the annual meeting of the Missouri Academy of General Practice, both scheduled for October.

O. B. BARGER, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Laclede County Medical Society

The Laclede County Medical Society held a dinner meeting at the hospital in Lebanon on Monday night, September 13. A number of the doctors' wives were also present to assist in entertaining a number of guest physicians and their wives from the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society. The business part of the meeting consisted of a discussion by Mr. Donald Koontz, of the Institute of Research from the University of Missouri, on matters pertaining to doctor reporting on the indigent medical and hospital care survey now in progress.

In addition an invitation by the visiting physicians was given the Laclede County Medical Society to hyphenate with the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society. This matter was given considerable discussion. The Laclede County Society, however, tabled the matter for later discussion at one of their Society meetings. The attendance at this meeting numbered twenty-five including doctors, their wives and guests.

G. E. FISHER, M.D., *Secretary*

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society

Robert W. Bartlett, M.D., Assistant Professor of Clinical Surgery, Washington University Medical School, St. Louis, spoke at a dinner meeting of the Phelps-Crawford-Dent-Pulaski-Maries County Medical Society at Rolla, on Thursday night, September 23.

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He discussed the subject "Modern Management of Common Thyroid Problems." A general discussion followed Dr. Bartlett's interesting presentation.

Many of the doctors' wives were also present at this opening meeting of the fall session.

M. K. Underwood, M.D., *Secretary*

South Central Counties Medical Society

The South Central Counties Medical Society met for dinner at the Arcade Hotel in West Plains, Wednesday night, August 18, with the following members and visitors present: Dr. and Mrs. **Jack Wiles,** Dr. and Mrs. **C. F. Callihan** and Dr. and Mrs. **Rollin H. Smith,** of West Plains; Dr. and Mrs. **C. W. Cooper,** of Thayer; Dr. and Mrs. A. T. Walker, of Mammoth Springs, Arkansas; Dr. and Mrs. **J. B. Kelly** and Dr. **T. J. Burns,** of Houston; Dr. **S. W. Connor** and Dr. **R. W. Denney,** of Mountain Grove; Dr. and Mrs. **M. B. Perkins,** of Willow Springs, and Dr. **Harold Lurie** and **Edwin M. Powell,** of Springfield.

Dr. Summers' reports of the last Council meeting was read and discussed at some length.

The application of Dr. M. L. Fowler, of West Plains, for membership was presented and he was elected unanimously.

It was voted with but one dissenting vote to ask the secretary to write to senators and representatives in congress and express our disapproval of the socializing of medicine by the free treatment of veterans for nonservice connected disabilities in the Veterans hospitals and to use their votes and influence to stop it. The free treatment of all service connected disabilities was heartily approved.

Dr. **Harold Lurie** discussed "Cardiac Arrhythmia," and Dr. **Edwin Powell** spoke on Testicular Disease."

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

A meeting of the Mineral Area County Medical Society was held Thursday night, September 23, at the State Hospital in Farmington.

The program for the evening was presented by Dr. **Leo J. Hartnett,** Department of Gynecology and Obstetrics, St. Louis University Medical School, who spoke on "Office Gynecology." Dr. Hartnett's practical discussion stimulated numerous questions and a good general discussion.

Jack Mullen, M.D., *Secretary*

Among Ourselves

(Continued from page 931)

and children enter without breakfast. Indicated hypodermic of hyoscine, to dry the tracheal secretions, is our only preoperative medication.

Induction of anesthesia with vinethene followed by open drop ether; 600,000 units of depo-penicillin following surgery as prophylaxis against upper respiratory infection secondary to anesthesia is used in each case.

Repair of infant hernias as an outpatient practice is nothing new, having been done for years in England and, essentially, the described routine was reported by MacLennan from Edinburgh (Clin. J. 1914). Five of our cases had hydrocele; four of the testicle and one of the spermatic cord; all communicated freely with the abdominal cavity through a patent processus vaginalis. In two cases the mother gave a history of the hydrocele being absent in the morning and becoming larger through the day. In two cases some months after repair of one side, a hernia appeared on the opposite side and the parents were quick to bring the child back for repair of the second side.

Surgical repair removes all danger of strangulation; it relieves the parents of worry; it ends the necessity of a truss; it leads to a happy ending for all concerned. We would recommend a careful review of Potts' article by anyone proposing this type of surgery.

Avery P. Rowlette, M.D.

Fraternally Yours

(Continued from page 932)

Auxiliaries in the various states are becoming active in this matter. We'll bet when the women get busy, the future success of the A.M.E.F. will be assured.

In the meantime, may we suggest each member do two things: Make a contribution himself, and also see if your colleagues and business friends could be interested. Remember, there are some public spirited citizens in business fields who want to help in any worthy project, many of these have a close affinity for doctors, some will even say "I wanted to be a doctor myself when I was a kid, but . . .," and a little stimulus from you, their friend and physician, will make them decide to contribute.

Let's do our part!

V.T.W.

Musings of the Field Secretary

(Continued from page 933)

Daniel B. Landau, M.D., Hannibal; John Sennott, M.D., Jefferson City, and Guy N. Magness, M.D., University City, represented the Association Committee at this session. Other organizations represented were: Missouri State Dental Association, Missouri Congress of Parents and Teachers, Missouri State Teachers Association, Missouri State Department of Education and the Missouri Division of Health. A general discussion was held as to how these organizations might well join forces in attacking some of the state's major school health problems; what are some of these problems and how and to whom may these particular organizations best make known the services on school

(Continued on page 948)

LONG BEFORE HOT FLUSHES APPEAR . . .

Patients presenting such classic menopausal symptoms as hot flushes cause little diagnostic difficulty. However, throughout the period of declining ovarian function which may begin long before hot flushes appear, many women complain of distressing symptoms which though less clearly defined are actually due to estrogen deficiency. For example, insomnia, headache, easy fatigability, and symptoms affecting the bones, joints, and the skin may not be readily identified as due to estrogen deficiency because they may occur years before, or even years after cessation of menstruation.

Investigators[1,2] have found that as the body attempts to adjust itself to declining estrogen production, a number of symptoms may appear which call for the prompt institution of estrogen replacement therapy. These symptoms may be nervous, circulatory, arthralgic, or dermatologic in character because the loss of ovarian hormone "withdraws one of the most important metabolic regulators of the organism"[3] and affects many body functions. If such metabolic imbalance or deficiency is evidenced, the administration of estrogen is clearly indicated.

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1. Werner, A.: Acta endocrinol. *13*:87, 1953.
2. Malleson, J.: Lancet *2*:158 (July 25) 1953.
3. Goldzieher, M. A., and Goldzieher, J. W.: Endocrine Treatment in General Practice, New York, Springer Publishing Company, Inc., 1953, p. 23.

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Musings of the Field Secretary

(Continued from page 944)

health which they are prepared to offer those in charge of such school programs. It was generally agreed that the next move in this matter might well be to contact the Missouri School Administrators Association, inform them of this initial meeting and seek their further direction. This agreement is in the process of activation.

Dr. Landau, as Chairman of the Committee, presided.

Clay County Clinical Conference

(Continued from page 938)

1:45 p.m.-2:30 p.m. Personal Use of Flowers, Miss Gladys Shaw of Floral Industries
2:30 p.m.-3:30 p.m. Club Room
Loveliness Unlimited, Miss Carolee Argo of Patricia Stevens Studio
3:30 p.m. 4:00 p.m. Coke Break
4:00 p.m.-5:00 p.m. Club Room
War Orphans of the World, Rev. Oscar Gustafson
5:00 p.m.-5:30 p.m. "Powder Time"
5:30 p.m.-6:30 p.m. Social Hour
6:30 p.m. Dinner, Ball Room. (With Members of the Clay County Medical Society.)

BOOK REVIEW

Symptoms of Visceral Disease, A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine, by Francis Marion Pottenger, A.M., M.D., LL.D., M.A.C.P., Medical Director, Pottenger Sanatorium and Clinic for Diseases of the Chest, Monrovia, California; Professor Emeritus of Clinical Medicine, University of Southern California; Author of "Clinical Tuberculosis," "Tuberculin in Diagnosis and Treatment," "Muscle Spasm and Degeneration." Seventh Edition with eighty-seven text illustrations and ten color plates. The C. V. Mosby Company, St. Louis, Mo. 1953. Price $7.50.

The seventh edition of this scholarly monograph is adequate evidence of its importance.

Dr. Pottinger has made notable contributions to

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CHARLES HUFNAGEL, M.D., Georgetown University.
AMOS R. KOONTZ, M.D., Johns Hopkins University.
CHAMP LYONS, M.D., Medical College of Alabama.
EARLE B. MAHONEY, M.D., University of Rochester.
K. ALVIN MERENDINO, M.D., University of Washington.
H. WILLIAM SCOTT, JR., M.D., Vanderbilt University.
DANELY P. SLAUGHTER, M.D., University of Illinois.
HARVEY B. STONE, M.D., Johns Hopkins University.
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the relationship of lung pathology to sensory changes and to subcutaneous atrophy as noted especially in the tuberculous.

This monograph summarizes these relationships and attempts to extend the knowledge of viscero-neurologic relationships. It is unfortunate that the multiplicity of reflex patterns is so varied that interpretation may be very confusing.

This is unquestionably an important book but it does not read easily. B. S. P.

Letter to Missouri Medicine

To the Editor:

The Post Office Department asks the assistance of the medical profession in apprehending one George Edward Payne, alias Ed Brown or George Brown, who needs medical attention about once a month for a kidney infection and probably also a lung infection, thought to be in this territory.

He is white, aged 31, height 5 feet, 11 inches, weight 165 to 180 pounds, dark brown eyes, medium complexion, soft spoken. He has blue tattoo of girl's head on inner forearm; tattoo of letters "Joe" on outer forearm; blue tattoo of "13" on base of thumb; blue tattoo of bird on upper forearm with letters "PAT" inset.

He is believed to be armed and is considered to be exceedingly dangerous. It is requested that if located, he be immediately arrested and the nearest post office inspector be notified. The U. S. Marshal at Indianapolis, Indiana, holds a warrant for his arrest.

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Cook County Graduate School of Medicine

Intensive Postgraduate Courses

SURGERY—Surgical Technic, Two Weeks, November 8, November 29
Surgical Technic, Surgical Anatomy & Clinical Surgery, Four Weeks, March 7, 1955
Surgical Anatomy & Clinical Surgery, Two Weeks, March 21, 1955
Surgery of Colon & Rectum, One Week, November 29
General Surgery, Two Weeks, December 6
Clinical Fractures, Two Weeks, by appointment

GYNECOLOGY—Vaginal Approach to Pelvic Surgery, One Week, November 1
Office & Operative Gynecology, Two Weeks, February 14, 1955

OBSTETRICS—General & Surgical Obstetrics, Two Weeks, November 1

MEDICINE—Gastroscopy & Gastroenterology, Two Weeks, November 1

RADIOLOGY—Clinical Diagnostic Course, Two Weeks, by appointment

PEDIATRICS—Clinical Course, Two Weeks, by appointment

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Curiosa et Trivia

William B. McCunniff, M.D.

Among the signers of the Declaration of Independence were five physicians: Benjamin Rush of Pennsylvania, Josiah Bartlett and Matthew Thornton of New Hampshire, Lyman Hall of Georgia, and Oliver Wolcott of Connecticut.

In Florence, in a chapel adjoining the Church of Santa Maria Maggiore, on a tombstone, is the inscription "Here lies Salvino di Armati digli Armati of Florence, the inventor of spectacles. May God forgive his sins. He died A.D. 1317."

Certainly not to be considered super-specialist doctors—"Ode to a Grecian Urn" was written by Dr. John Keats; Dr. Samuel Garth wrote "The Dispensary"; Dr. Oliver Goldsmith, "The Deserted Village"; Dr. Samuel Taylor Coleridge, "The Ancient Mariner."

In the period 1938-42, American physicians fared pretty poorly in the preventable disease department when compared to all white American males. Death rates per 100,000 from appendicitis were 10.3 for the former versus 13.4; from hernia and obstruction 12.1 vs. 16.1; suicide 39.0 vs. 37.6; and pneumonia and influenza 112.5 vs. 103.0.

Our very favorite medical columnist, J. J. Lightbody, quotes Dr. Walsh's paper on the causes of backache—a series of eight "tics": Traumatic, Chiropractic, Acrobatic, Arthritic, Phlegmatic, Automatic, Climatic, and Climactic.

Over a period of thirteen years, Lederle Laboratories' horse, "Jumbo" gave 450 gallons of blood used in antitoxin production.

Capsule Clinics

Irving A. Wien, M.D.

- Cortisone given orally is a valuable addition to the local and immunologic treatment for some infants with severe eczema. Hill, L. W.: New England J. Med. **248** (June 18) 1953.
- The basal metabolism as a measure of thyroid function is here to stay and so are technics employing I^{131}, but none of these tests are better than the five senses of the physician in weighing the evidence to determine the status of the patient's thyroid function. Blackburn, C. M.: Missouri Medicine **50** (September) 1953.
- Pain in a duodenal ulcer may be due to contact by the acid chyme, mechanical stimulation of the ulcer, or contractions of the wall of the duodenal cap. Best, C. H., and Taylor, N. B.: Physiological Basis of Medical Practice, Williams & Wilkins Co., Baltimore, 1945.
- The nephron is the functional unit of the kidney, comprising the renal (or Malpighian) corpuscle, and the renal tubule (which includes the proximal convoluted tubule, loop of Henle, and the distal convoluted tubule). Best, C. H., and Taylor, N. B.: Physiological Basis of Medical Practice, Williams & Wilkins Co., Baltimore, 1945.
- Cancer of the male genitourinary tract constitutes 6.4 per cent of the total cancer in both the male and female population. In the male 3.4 per cent of this cancer occurs in the prostate, seminal vesicles and adnexae. The Cancer Bulletin, Missouri Ed., November-December, 1953.
- A Wilms tumor of the kidney may be considered cured in 95 per cent of the cases after eighteen months have elapsed after operation without evident metastases. However one must constantly bear in mind that the five year survival rate is approximately 15 per cent. The Cancer Bulletin, Missouri Ed., November-December, 1953.
- Milliequivalent and millisomol must be adopted universally as units of measure of plasma solutes for the solution of many problems of fluid balance, since only then are we able to rate the plasma solutes in terms of their osmotic powers. The rating of ions in the fluids of the body in terms of milligrams per cent, grams per cent, or volumes per cent is similar to rating engines on the basis of weight without regard to their capacity of producing power. Moyer, C. A.: Fluid Balance, Clinical Manual, Year Book Publishers, Inc., Chicago, 1952.

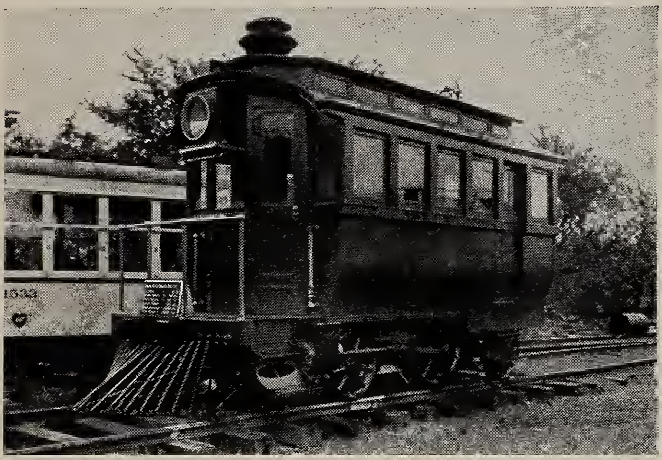
Entered as second-class matter, February 18, 1925, at the post office at Fulton, Missouri, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Publication Office: 1201-5 Bluff Street, Fulton, Missouri. Editorial Office: 634 N. Grand Ave., St. Louis 3, Mo. Subscription Price: $3.00 Per Year. Printed by The Ovid Bell Press, Inc., Fulton, Missouri.

What Is Your Hobby, Doctor?

"The Museum of Transport"

Many medical colleagues approach a hobby as a dilettante, in a half apologetic frame of mind. Not so John P. Roberts, M.D., St. Louis, President of the Museum of Transport, Inc.

Dr. Roberts first became interested in preserving older specimens of transportation while attached to the V.A. As one of the founder group, which he now serves as president, he soon found this hobby, or avocation, as he calls it, requires actual physical work. To recondition an old, beaten-up railroad engine or passenger car, requires more than a wish or a fancy. To restore the old glitter and shine requires time, work and "elbow-grease."



Black Diamond, 1889.

And this, Roberts insists, constitutes more than a hobby.

St. Louis is unique in having the only public museum devoted exclusively to transportation, with especial emphasis on older specimens. This is fitting, for St. Louis is our nation's second largest center of transportation, and, due to its geographic location, is often referred to as the "hub" of the transportation wheel.

In the 54 acre tract, located at Barretts Station Road in St. Louis County, are many examples of various forms of transportation. Thus passengers on the west bound, up to the minute Missouri Pacific trains today can peep, as they pass, at the engines and cars their grandfathers used. And on the same site is Barretts tunnel, one of the first tunnels in use west of the Mississippi. This tunnel went into service in 1853.

Around 30,000 visitors came last year to visit the museum, which is supported by dues from members, by freewill donations of the visitors, and by others interested in this project. Most of the specimens have been presented to the Museum by railroads and other transportation factors.

"Black Diamond," pictured here, is a "before" representation. She was built in 1889 by Baldwin, was used as an inspection locomotive, and was presented to the Museum by the Reading lines. You should see her now in her "after" radiance, with all the "spit and polish"—she looks like they had just "let her roll" out of the factory.

We salute Dr. Roberts and his group for their attempt to preserve a valuable and unique bit of Americana; he's right, of course, this is a hobby which is more than a hobby!

Pettis County Pot Pourri

C. Gordon Stauffacher, M.D.

A patient entered my office and settled back in the consultation chair.

"Well, sir," I asked, "What brought you to the office today?"

"An automobile," he replied blandly.

Jim says that Santa Claus is the only man who can run around all night with a bag and not get talked about.

One of the local Doc's told me this one about one of his patients.

It seems this patient has a 6 or 7 year old boy who was practicing the piano. She was listening to him play and suddenly when he hit a sour note he would say "pregnant." After this was repeated several times, she became curious and went to her son and said, "Johnny, you shouldn't say pregnant when you make a mistake. And, anyway, whatever gave you the idea of saying that?"

"Well, Mommy," replied Johnny, "Last night when I was in bed I heard you tell Daddy that you were pregnant and he said 'That's a hell of a note.' "

Was down in Springfield a while back and someone was telling how dry it was down there, and how they had to conserve water, etc., when his wife added that it was so dry that the trees were chasing the dogs.

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Missouri Academy of General Practice

William J. Shaw, M.D.

General practitioners in Missouri have ample opportunity to meet the annual study requirements of the A.A.G.P. without losing any appreciable time from practice.

The A.A.G.P. was founded with the basic concept that the fifty hours of formal study mandatory for continued membership must be accompanied by an opportunity for every general practitioner to meet such a requirement. The outstanding accomplishment of the Missouri Academy is the postgraduate program given throughout the state. It has been well organized and administered by the Academy committee on education, the State Medical Association and the medical schools.

Other methods of meeting the challenge of postgraduate medical instruction have been adopted by other states. Several states use traveling teams of qualified doctors who give clinics in various sections of the state. Two states use a state-wide telephone hook up for a one or two hour medical program carried by private wire to county societies in outlying areas. One state has a large library of medical lectures on phonograph records which are rented to groups in remote areas. A company in California is now detailing a tape recorder and synchronized film projector and renting out weekly tape recordings on timely medical subjects. It is apparent that at present far greater emphasis is being placed on the continued education of the general practitioner than ever before.

During 1953, 66,000 physicians attended approximately 1,600 formal postgraduate courses offered throughout the United States, an increase of 43 per cent over 1952. Concurrently with the resurgence of interest in postgraduate courses for doctors, there appeared more interest in general practice in the medical schools—by both students and faculty. Six years ago two of ten seniors planned to enter general practice; last year six of ten throughout the country signified such an intention.

Evidently Missouri doctors share the belief of the medical educators in the state and nation that basic medicine should be taught in the medical schools. Specialty training must be a postgraduate experience in which general practice may be as demanding as any of the limited fields.

Crossroads Comment

Peter V. Siegel, M.D.

Dear Uncle Ted:

The other day I read a news release in the *K.C. Star* about our four year medical school. Reading it sort of scraped the scabs off some old sores. Some folks around here are still mighty disappointed that the school wasn't located here in Smithton. They figure that round about here is just about as rural as one can get.

In case you didn't read the story it was mostly about how it was progressing, and specifically noticeable was the amount of money already appropriated and how much it was going to take to run it. The story was released from the acting president's office. Not one smitherine was mentioned about any doctors having anything to do with the school. But then we already know that in the state of Mo. doctors don't know a thing about medical schools.

Next day or so I happened to be at a meeting where the subject came up and someone said we hadn't ought to be talking about it like we were. Seeing how the place was being built we all ought to get behind it and make it a success. Hadn't noticed anyone locally getting the chance to do either. He happened to be from about the only local society that favored the location. We all sort of got the idea that his society was sitting on its collective blister since quite a few had sort of figured on being professors of something.

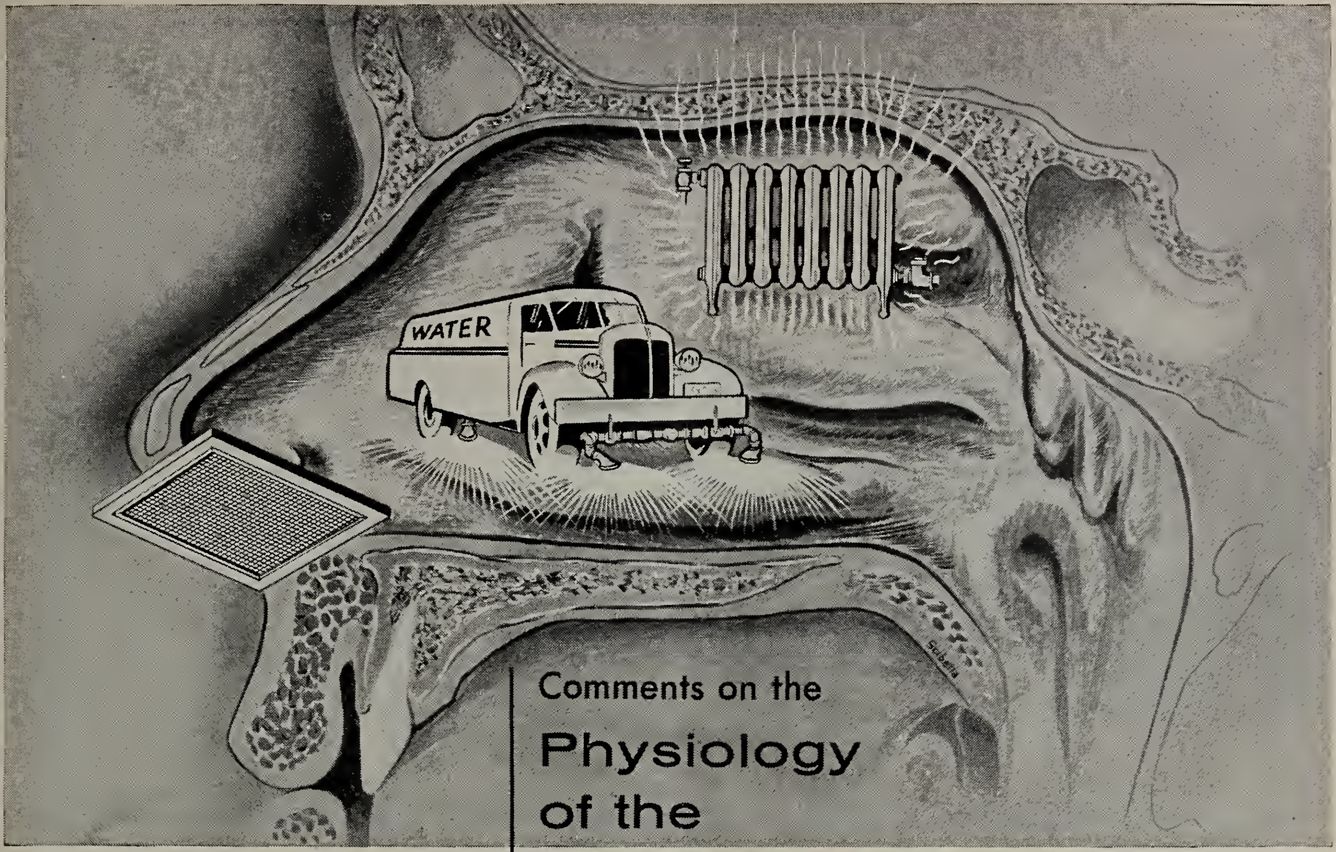
Now that its apparent we got the money to build the school—and maybe to run it—there are a couple major items that are conspicuous because of all the silence concerning them. For instance where are the patients going to come from, especially the number that will be needed. If service to the rural population is to be a major function I for one would like to know how they are gonna be serviced.

Another angle that's high time. It's been assumed that the major portion of the graduates will locate in rural Missouri. Who is going to teach them to practice medicine like they will have to in rural Missouri? So far I can't say where any of the major appointments have ever had a private practice, let alone a rural one. I just don't think a racehorse can teach an old plug how to pull a plow.

Or should we talk about an institution that concerns us all? I just don't breathe too good with my head in the sand.

Your nephew,

Pete



Comments on the
Physiology
of the
Upper Respiratory
Tract

THE NASAL CAVITY:

The main functions of the nasal cavity are conditioning and exchanging air between the atmosphere and the lungs, as well as smelling. Gross impurities are removed by the fine nostril hairs, and finer impurities are enveloped in the mucous secretion of the intranasal lining and carried away by ciliary action. The air is warmed to a degree approaching body temperature and humidified. About 500 cc. of air are taken in during an ordinary inspiration, totaling 12,000,000 cc. daily.

In the common cold . . . when hypersecretion and mucosal swelling interfere with the normal aeration pattern, when abnormal mouth breathing is resorted to as a distress measure, relief can be obtained promptly with topical application of Neo-Synephrine hydrochloride. This potent vasoconstrictor is usually well tolerated – produces practically no sting or irritation on application to mucous membranes – even in infants.

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1% Solution
0.5% Jelly
0.25% Emulsion

Nasal Spray
Plastic, unbreakable, leakproof squeeze bottle; delivers fine even mist.

Neo-Synephrine (brand of phenylephrine), trademark reg. U. S. Pat. Off.

Missouri Medicine in Review

Leo H. Pollock, M.D.

DECEMBER, 1914

W. K. Statler, M.D., Oak Ridge, Missouri, prophesies in the *State Journal,* "The longevity of any organization depends on its efficiency for service. When an institution ceases to serve, its early fall is inevitable. This law applies to medical organizations, as well as to social institutions."

A Modoc says he had rather stay home or in his office than attend a medical "gab-fest" where some young, inexperienced enthusiast expounds on pernicious anemia, or some old fogy expatiates on Colles' fracture. He can read a much better discussion in Osler, Cabot or the new Keen. Like a man who abstains from Sunday church, because he has a family home Bible on the mantle, perfectly preserved. There is no better means of revitalizing such a growing indisposition than the regular attendance of medical gatherings.

Dr. Park, N. Y. Research Laboratory stresses large initial doses of diphtheria antitoxin; he uses the intramuscular route. This disease is prevalent in our state.

The new Union Station at K. C. was opened November 1. A unique feature is the emergency hospital, costing $1,000, where injured and sick travelers will receive care.

Dr. F. J. Stierberger, Union, was victimized by a peculiar accident recently; he narrowly escaped death. Under dental treatment a drill burr slipped and dropped into his trachea, lodging deep in the bronchial tube. Removed, the doctor has recovered.

Dr. Victor C. Vaughan, Ann Arbor, President, A.M.A., Dr. George H. Simmons, Editor and General Manager, A.M.A., Dr. A. R. Craig, Secretary, A.M.A., and Dr. H. C. Shuttee, President, M.S.M.A., were St. Louis Medical Society guests at its regular meeting, December 12.

DECEMBER, 1929

Dr. Alexis F. Hartmann, St. Louis, was Colorado State Medical Society guest, Fifty-Ninth Session, at Greeley.

Dr. Emmett P. North, St. Louis, was elected one of fourteen governors, Alumni Association of the A.M.A. of Vienna.

The Abderhalden (Ninhydrin)-pregnancy test has fallen into disrepute. No evidence exists that a specific pregnancy ferment exists. Tests on serum from pregnant women are uniformly positive, but the large number of positive results on men and nonpregnant women proved the test valueless. (J.A.M.A., March 9, 1929.)

Nowhere is scientific thought (and even honesty) more disregarded than in pseudobiochemical propaganda connected with exploitation of dentifrices, mouth washes. Principally, a dentrifice cleans the teeth, or more practically, establishes a health habit. The evidence opposes the view that dentifrices can effect so-called mouth correction. (J.A.M.A., March 16, 1929.)

Orders emanate to vacate the present V.A. hospital at Excelsior Springs by November 15. A new addition, to cost $900,000, will begin.

DECEMBER, 1944

The following MoDocs were accepted in the A. C. of S.: Drs. Everett D. Sugarbaker, Columbia; W. F. Francka, Hannibal; Hugh G. Hamilton, Kansas City; Samuel P. Harbison, Louis H. Jorstad and William J. Wotawa, St. Louis; Edward C. Holscher, Glendale; Harold J. Shelton, Webster Groves; Eutimio D. Tenaglia, Clayton; A. Denton Vail, Springfield.

December *Fortune* carries an article of interest of physicians, "U. S. Medicine in Transition."

Dr. Earl Engle, Columbia University College of P. and S., N. Y., presented the annual Robert J. Terry Lecture, St. Louis Medical Society, December 19.

The Kansas City O.O.R.L. Society will present an oil painting of Dr. Hal Foster, K. C., to the American Academy, at its Chicago, 1945, meeting, when the Academy will celebrate its fiftieth anniversary. The Academy was founded by Dr. Foster in Kansas City, April 9-10, 1896.

The A. C. of S. has declared 3,152 hospitals in the U. S. and Canada are on the 1944 "Approved List" of hospitals of 25 beds or more.

"SUMMERCATION"

Expectancy of idleness,
Buying clothes to idle in,
Finding a place to idle,
Determining the exact date and hour of leaving,
Staying up late the night before,
Packing,
Then a few hours rest,
Small fry up at day-break,
Piling stuff in car,
Kids on top of suit-cases,
Engine starts,

(Continued on page 972)

". . . the gastric secretion is the immediate agent of mucosal tissue digestion. . . . Opposed to this stands the defensive factor . . . the two-component mucous barrier"[1] [*the protecting layer of mucus and the mucosal epithelium*].

Rotational gastroscopic views showing coating effect 1½ hours after administration of Amphojel.[2]

Causation – key to treatment in peptic ulcer

Through *topical* action alone, AMPHOJEL contends with the local causes of ulcer—aggressive acidity coupled with impairment of the wall defenses. Providing a dual approach, AMPHOJEL combines two aluminum hydroxide gels, one reactive, one demulcent. The reactive gel combats the attacking factor in ulcer by promptly buffering gastric acid. The demulcent gel promotes healing of the denuded mucosa by forming a viscous, protective coagulum.

AMPHOJEL—nonsystemic, nontoxic—provides time-proved *fundamental* therapy in peptic ulcer.

AMPHOJEL®

ALUMINUM HYDROXIDE GEL

Supplied: Liquid, bottles of 12 fluidounces
Tablets, 5 grain, boxes of 30, bottles of 100; and 10 grain, boxes of 60 and 1000

References: 1. Hollander, F.: Arch. Int. Med. *93:*107 (Jan.) 1954
2. Deutsch, E.: Scientific Exhibit, Gastroscopy, Clinical Meeting A.M.A., St. Louis, December, 1953

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With Our Auxiliary

Mrs. W. E. Martin, *President*

With the October issue, *Today's Health* will reach a circulation of more than 340,000 copies, which is the highest circulation in its thirty-one year history. We, of the Auxiliary, are proud to be told this increase in circulation is due to our diligent efforts, and our subscription projects at the national, state and county level. The Woman's Auxiliary has devoted a great deal of their program to the promotion of subscriptions to *Today's Health,* because they recognize that the magazine can fulfill its purpose of health education of the laity, and emphasize their personal need for a family doctor, and the community need to suppress medical fraud and quackery.

Today's Health is now found in the reception rooms of more than 103,000 physicians and 45,000 dentists. These copies are seen by many thousands of patients every week. The nation's railroads, airlines and steamship lines have asked for copies to be made available to them, and soon *Today's Health* will be found in the lounges of the country's leading passenger carriers. Every public and school library has the magazine, and many classrooms are studying its articles.

This year, the A.M.A. Auxiliary chairman, Mrs. Richard Stover, Miami, Florida, with the regional chairman and our Missouri Mrs. J. S. Summers, are promoting two "Operations." The goal of "Operation Christmas" is this: a Christmas gift subscription to at least one lay person from every member of each local Auxiliary. Gift subscriptions will be welcomed by young parents, school teachers, new mothers, newlyweds as well as elderly and retired men and women. As a bag of candy in appreciation of payment of maternity bills, why not give a subscription to *Today's Health?*

"Operation M.D. and D.D.S." is trial subscriptions which have been placed in the offices of physicians and dentists in the large cities. The local chairman should contact the physician or dentist before this trial subscription expires and tell him about the special rate of $1.50 (or half price) to physicians, dentists and auxiliary members. You can be sure that the trial period has convinced patients that they Like, Read, and do Want *Today's Health.*

With all this talk about special projects for this year, let us remind you not to forget or neglect your regular subscription. Send your renewal or new subscription to your local T.H. chairman, or to Mrs. J. S. Summers, 114 W. Circle, Jefferson City.

Missouri attained 92 per cent of the goal last year. Let's be 100 per cent in 1955!

"Summercation"

(Continued from page 970)

Car moves one block,
Forgotten thermos,
Damn,
Return to house,
Neighbors now up,
Embarrassed.
Get thermos,
Start car,
Stop car,
Boy to bathroom,
Long wait,
Phone rings,
Let 'er ring,
Boy in car,
Off again,
Travel four blocks,
Boys start on lunch,
Banana peels out window,
Travel fast to make up time,
Woman signals—left turn,
Makes sharp turn to right,
Damn,
Brakes screech,
Luggage in back seat now in front seat,
Thumb on nose,
Start again,
Men bumming rides,
Must be suspicious,
Awful murders,
Boom! Flat tire,
Change to spare,
Boys in bushes,
Off again,
Get to cottage,
Rain like hell,
Roof leaks,
Rain down chimney,
Fire-place flooded,
Good outside toilet,
Sears-Roebuck catalog,
Close to well,
Too close,
High humidity and humility,
Rain stops,
Sun shines,
Unpack bathing suits,
Moth holes in business section,
Needle-thread,
Snip-snip,
Put on trunks,
Too small,
Must have shrunk,

(Continued on page 974)

The High Protein Diet fits any budget!

Getting enough high-quality protein in your patient's diet doesn't require an unlimited budget. Meat, of course, is an outstanding source, but it can easily be reinforced with other protein foods.

Mix a protein bonus in the main dishes—

Your patient can add skim milk powder along with the seasonings in meat loaf—then hide hard-cooked eggs inside for a bright-eyed surprise.

A fluffy omelet folded over penny-sliced frankfurters, ground cooked meat, flaked fish or cheese is both tempting and economical.

And a green salad topped generously with shoestrings of meat and cheese carries its weight in protein.

Then add more to the rest of the meal—

Cottage cheese is happily versatile. It tops any salad—fruit, vegetable, flaked fish. Makes a pleasing spread, too, especially on dark breads. Thinned with milk and mixed with chili sauce, it's a zesty salad dressing. Or a good amount can be whipped into mashed potatoes.

An egg white whipped into fruit juice makes a frothy flip. Or you might suggest gelatin instead.

And a fruit-cheese dessert is a gourmet's delight. Pears go with blue cheese, apples with Camembert, orange sections with cream or cottage cheese.

Of course, not all protein foods supply all the amino acids. But with sufficient variety, the diet is likely to supply all the essential ones, and at the same time assure adequate amounts of the vitamins necessary for proper protein metabolism.

United States Brewers Foundation

Beer—America's Beverage of Moderation

Protein 0.8 Gm. Calories 104/8 oz. glass (AVERAGE OF AMERICAN BEERS)

If you'd like reprints for your patients, please write United States Brewers Foundation, 535 Fifth Avenue, New York 17, N. Y.

Guest Editorial

EDWARD J. McCORMICK, M.D., *Immediate Past President, A.M.A.*

The medical profession should be complimented for its efforts in preserving American Democracy which has made the United States of America the greatest country in the world. We are leaders in science, in industry, in medicine, in business and in every walk of life. We have reached the stage of affluence when many people seem to think that the United States Treasury which is filled with the dollars of American taxpayers is without limit as far as federal support of all activities is concerned. There are those who believe that medical schools should be supported by federal subsidy and the same treatment should be given to schools of nursing and to other educational institutions. There are labor leaders who demand compulsory health insurance and expanding benefits from industry and from government. There are many social workers who are honest and interested in their work but who feel that more and more money should be donated to the problems in which they are interested. The spokesmen for some veteran's organizations which represent a small percentage of the men who have served their country, feel that more and more veteran's hospitals should be erected and that more free treatment should be given to veterans whether or not their sickness or disability is service connected. There are many communities whose prominent citizens rush to Washington seeking support for various activities of one kind or another.

It is not fair, therefore, to condemn our federal leaders who have much pressure exerted by lobbyists and others for federal dole. We in America who have become so prosperous are forcing federal bureaucracy upon ourselves. It is time indeed that the average citizen realizes that he or she gets from Washington only what is paid for and sometimes the cost is great because money going from the individual states and counties to Washington and then back to a local community shrinks considerably in value.

When the Constitution of the United States and the Bill of Rights were written it was the idea of the Founding Fathers that individuals, local communities and states should not only be possessed of certain rights, but should support themselves. There are, of course, certain activities which affect the entire nation in which the federal government must maintain an interest and support to some extent. However, the ever expanding grant-in-aid programs of one kind or another will eventually take away the independence of our states and of our local governments.

I am calling these matters to your attention at this time in this guest editorial in order to pay a compliment to the medical profession which through the years has stressed the necessity of personal initiative and independence.

"Summercation"

(Continued from page 972)

Put on slacks,
Go on beach,
Bare feet,
Shove boat in water,
Leaks like sieve,
Get out quick,
Take walk up beach,
Stub toe on rock,
Damn,
Back to cottage,
Getting dark,
Sunset good,
Mosquitoes start,
Citronella,
Smells bad,
Sit on screened porch,
Holes in screen,
Bugs come in,
We get out,
Go to bed.
Next day—same thing—
Plus—weenie-roasts,
Sandflies,
Marshmallow roasts,
Relatives visit,
Clean-out ice-box,
Groceries gone,
Go to town,
High prices—worse than city,
Back to cottage,
Corn roasts,
Sun-tan oil,
Sand in bed.
Thundermug,
Squeakie springs,
Poison ivy,
Green apples,
Back door,
Quick step,
Bismuth,
Vacation ends,
Go home,
Get in late,
Open windows,
Phone rings,
Answer—quick,
Wrong number,
Damn!
Good Night.
(A reminder of last July-August, Ed.)

by J. J. Lightbody, M.D.
Reprinted from Detroit Medical News

"These tablets keep the swelling down all day long."
TABLET

NEOHYDRIN®

BRAND OF CHLORMERODRIN

NORMAL OUTPUT OF SODIUM AND WATER

Individualized daily dosage of NEOHYDRIN -- 1 to 6 tablets a day as needed -- prevents the recurrent daily sodium and water reaccumulation which may occur with single-dose diuretics. Arbitrary limitation of dosage or rest periods to forestall refractivity are unnecessary. Therapy with NEOHYDRIN need never be interrupted or delayed for therapeutic reasons. Because it curbs sodium retention by inhibiting succinic dehydrogenase in the kidney only, NEOHYDRIN does not cause side actions due to widespread enzyme inhibition in other organs.

Prescribe NEOHYDRIN in bottles of 50 tablets. There are 18.3 mg. of 3-chloromercuri-2-methoxy-propylurea in each tablet.

Leadership in diuretic research
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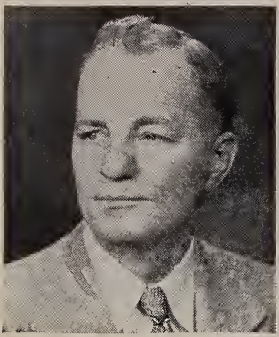
President's Comments



Before another issue of MISSOURI MEDICINE appears, members will be making their plans for the New Year, 1955. For several months the Committee on Scientific and Postgraduate Work has been making plans for 1955; among these is the 1955 Annual Session. As the program develops, it becomes more evident that all members should include this Annual Session in their schedule. When that new calendar is placed on your desk, why not turn to March right away and mark March 27, 28, 29, 30 "Attending Missouri State Medical Association Annual Session"? The session will be held in Kansas City, all formal scientific sessions in the Municipal Auditorium and round table luncheons and the Annual Banquet to be held at the President Hotel.

Included in the guest speakers who will appear on the program are Irvine Page, M.D., Cleveland, internist; Phil Thorek, M.D., Chicago, surgeon; Priscilla White, M.D., Boston, internist and pediatrician; George Crile, M.D., Cleveland, surgeon; C. D. Davis, M.D., Columbia, Missouri, recently of Durham, N. C., obstetrician; Leo H. Garland, M.D., San Francisco, roentgenologist; Louis A. Soloff, M.D., Philadelphia, internist; Francis D. Murphy, M.D., Milwaukee; Elmer Hess, M.D., Erie, Pennsylvania, urologist, and President-Elect of the American Medical Association, who, probably in addition to a scientific presentation, will speak to the House of Delegates.

Color television will bring the operating room and the clinic into the scientific meeting hall on the large screen. Kansas City physicians will present a similar excellent program as they have done before, the telecasting being done at the Kansas City General Hospital.

Why wait for the new calendar? Mark down in the "carry forward" section those March dates.

H. E. PETERSON, M.D.

Division of Health

JAMES R. AMOS, M.D., *Director*

The Bureau of Food and Drug of the Missouri Division of Health is charged with the promotion of sanitation in public eating and drinking places at state and county fairs and at certain conventions.

An example of how the Bureau of Food and Drug works may be found in a report of its activities at the Missouri State Fair held at Sedalia August 21-29, 1954. An analysis of this report shows that personnel of the bureau worked closely with Fair Board officials advising them on problems of sanitation. With the cooperation of the officials, all meat, bread, milk products and soft drinks were obtained from approved sources. These various sources were inspected by personnel of the bureau prior to the opening date of the State Fair. Three days before the Fair opened, a meeting of all concessionnaires was called for the purpose of discussing the major items. Companies furnishing meat, bread and milk also attended this meeting and were advised on bureau's regulations concerning the products which they were to furnish.

A mobile laboratory was moved to the fair grounds in order that bacteriologic examination of specimens might be made on the spot.

Prior to the first day of the Fair, arrangements were made with the dispensary located on the grounds to notify representatives of the Division of Health of any reported food poisoning outbreaks.

During the entire Fair each of the ninety-seven eating or drinking places were checked daily, many twice daily. All foods entering the fair grounds were sampled periodically as were all ices and frozen desserts.

On several occasions laboratory analyses indicated the necessity for added precautions on the part of the concessionnaires. Concessionnaires were advised and instructed on washing, rinsing and sterilizing, all multiuse utensils. When high bacteriologic counts were found, proper cleaning and bactericidal treatment reduced these counts within the allowable time. Cooperation of Fair officials with the Division of Health personnel was excellent throughout the total time the Fair was in operation. On several occasions the Division of Health's recommendations for improving sanitation were readily accepted and acted upon. It is with great pride that the Missouri Division of Health, along with the concessionnaires and the State Fair Board officials, report that, to their knowledge, no food poisoning or food intoxication occurred at the Missouri State Fair in 1954.

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The Value of Tracheotomy in Eclampsia

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In previous communications[1, 2, 3] we presented our results utilizing tracheotomy as a part of the therapy applied in eclamptic patients. Our observations on patients in whom this procedure has been utilized and the results so obtained leads us to state emphatically that tracheotomy does have a place in the treatment of eclamptic patients and many lives that otherwise would have been lost will be saved by the addition of this operation. Tracheotomy was first used by us in the treatment of eclampsia in November of 1950.[1] Since that time we have utilized the procedure in thirty cases. These cases serve as a basis of this report.

MANAGEMENT OF THE ECLAMPTIC PATIENT ON THE TULANE UNIT, CHARITY HOSPITAL, NEW ORLEANS

The basic management of the eclamptic patient is sedation, administration of fluids, oxygen and the establishment and maintenance of an airway. We have not used veratrum viride or any of its derivatives nor have we employed any of the "hypotensive agents," though we realize that a reduction in blood pressure from hypertensive levels is most desirable. Preferably, the eclamptic patient should have a room to herself and someone in constant attendance.

SEDATION

Many schools of thought and many arguments both pro and con have appeared in the literature from various centers as to whether one should use morphine, sodium amytal, demoral, phenobarbital, magnesium sulphate, alone or in combination in an attempt to control the patient's convulsions and perhaps lower blood pressure. We believe that it makes little or no difference as to what type of sedative is used. The dosage however is important. High dosage may lower the respiratory rate to dangerous levels. It is extremely important to remember, also, that the use of barbiturates in high doses definitely decreases the utilization of oxygen by the brain.[4] However, many eclamptics are in need of a great deal of sedation in order that convulsive seizures are controlled. It is also important to remember that in edematous patients drugs administered subcutaneously or intramuscularly may be absorbed at a slow rate. Intravenous administration is best in these cases. It is also of interest that cases of barbiturate poisoning have been aided by tracheotomy.[5]

At the present time we utilize morphine sulphate as a basis of our anticonvulsive regimen augmented by phenobarbital or sodium amytal, depending on the severity of the disease and the number of convulsions. It is our impression that, since employing tracheotomy, in a number of our cases of eclampsia, the amount of sedation necessary to control the convulsion has been decreased. The larger number of eclamptic patients that we see do not arise in our own clinic patients but are sent to us from many distant areas. The first principle in the treatment of eclampsia should be the same as that of the treatment of fractures and that is "splint" the patients where they lie. Only too often we have observed patients sent from many miles distant without any sedation of any type having been administered. The time interval between onset of convulsions and sedation, we believe, plays an important factor in the outcome of the disease. When the patient has convulsions, they should be immediately controlled. McCall[6] has shown that following a convulsion, utilization of oxygen by the brain is depressed for a long period of time. In an attempt to control seizures it matters not whether

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one believes that morphine should be used, that magnesium sulphate should or should not be used or the barbiturates should or should not be used. The important point is that an attempt should be made to control convulsions by the use of a sedative until convulsions are controlled and this patient can be hospitalized. Veratrum viride and its derivatives and hypotensive agents require constant observation of the patient and, if used, should be administered only when the patient has been hospitalized.[7] We wish to reemphasize that we have not had any experience with hypotensive agents or veratrum derivatives.

FLUIDS

Much has been written about fluid balance in the management of the eclamptic patient. Certainly all agree that sodium chloride should not be used. As to the amount and type of fluid used, various types of therapy are suggested. One school of thought believes that the administration of small quantities of high concentrated solutions of glucose is the desirable treatment, others believe that because of the hemoconcentration found in these patients that a large amount of fluids, 3 to 4,000 cc. a day, of a 5 or 10 per cent glucose solution should be utilized. Our concept of the matter is that these patients should be treated as are cases of lower nephron nephrosis. Heart failure, edema of the lungs or an increase of exudate of the tracheobronchial tree can be initiated by the injudicious use of large volumes of fluids. Our policy is to administer 1,000 cc. of 5 per cent solution in twenty-four hours plus an amount of the same solution equal to the patient's urinary output. These patients are usually edematous and water logged and we do not believe that the administration of a concentrated glucose solution will aid in the excretion of more urine, or that by the administration of 4,000 cc. of fluid per day that we will increase the patient's output. And though briefly the pathology in the kidney can be stated as being a constriction of the afferent arteriole with an ischemic glomerulus, we do not believe that the total effect of the ischemia is limited to the glomeruli but rather that the nephrons are involved as well. Fluids should be administered judiciously in small amounts containing a low concentration of glucose and the plan should be to follow the same type of fluid balance regimen as is utilized in the treatment of diseased nephrons so frequently seen following crush injuries of the extremities or blood transfusion reactions. The utilization of this type of fluid regimen for the last four years has been gratifying as far as we are concerned.

SPECIAL SURROUNDINGS

All obstetric units do not have a special room for severe pre-eclamptic or eclamptic patients. Such a room is available at Charity Hospital in New Orleans and though at all institution such may not exist, an eclamptic patient should be placed in a room to herself. There should be a constant attendant, be this attendant a graduate nurse, a student, an intern, a resident or a member of the family, depending upon the availability of personnel.

AIRWAY

The maintenance of an adequate airway to allow for the exchange of gases in the lung is imperative. A suction machine and either metal or rubber airways should be available. Apparatus for the administration of oxygen should be easily accessible. However, if respiratory difficulty is observed, despite the fact that a metal or rubber airway is being used, or if it is impossible to keep the trachea clear by use of an airway and suction, or should laryngospasm or cyanosis be observed, or if respirations are shallow or labored, or if laryngospasm occurs when an airway is introduced, then tracheotomy should be utilized. The establishment and maintenance of an airway is equally or more important than is sedation and fluid management.

TERMINATION OF PREGNANCY

It is quite important that once the control of convulsions is established and the patient fairly well stabilized that pregnancy be interrupted. Whether delivery is to be accomplished per vagina or by cesarean section depends entirely upon the condition of the cervix. Should the cervix be long and thick termination by cesarean section, under local anesthesia, is best. Should the cervix be effaced, whether or not dilitation is present, rupture of the membranes in an attempt to stimulate the onset of labor is best. If by the utilization of methods previously mentioned, the patient fails to improve, then the pregnancy should be terminated immediately by cesarean section under local anesthesia. One should not be lulled into a sense of false security by success attained in controlling the disease. Once the disease is controlled the uterus should be emptied; nothing is gained by waiting longer in an attempt to carry gestation nearer term. The disease will recur and the patient probably succumb. Recurrence of eclampsia in the same pregnancy carries a much higher mortality rate than does the first attack.

WHY TRACHEOTOMY IN ECLAMPSIA?

Tracheotomy has been reported as being of much value in cases of tetanus, brain tumor, cerebral abscess, head injuries, multiple rib fractures, crush injuries of the chest, poliomyelitis and other medical and surgical conditions.[8 to 19] In all of these conditions there is depression of the cough reflex by coma, pain, general debility, depression of the respiratory center, anesthesia, analgesia or other causes. In eclampsia as in the aforementioned conditions respiratory depression may occur from edema of the brain, cerebral hemorrhage, cerebral softening, meningeal hemorrhage or sedation. With depressed respiratory function hypoxia occurs and a vicious circle is established. McCall[4] has shown that "eclampsia is a disease associated with oxygen deprivation and deficient uptake of oxygen during the convulsive stage and comprised cellular oxygen metabolism in the presence of normal oxygen supply during the comatose phase." Therefore any method that might be of benefit in combatting hypoxia should be of benefit in eclampsia. Any method of therapy that might be of value in cases having brain pathology or altered physiology should be of benefit in cases of eclampsia. Tracheotomy is an operation that helps in each situation. Why not, then, use it in eclamptic patients when indicated?

When there is depression or abolition of the cough reflex by any of the previously mentioned conditions, pooling of secretions in the nasopharynx produces increased resistance to breathing and the pooled secretions in the nasopharynx may eventuate in almost complete obstruction and the patient drown in her own secretions. Laryngospasm, either spontaneous, or induced by an attempt to pass a metal or rubber airway, may complicate the picture. With tracheotomy there is a marked reduction in resistance to breathing, the pooled secretions are by-passed and laryngospasm is no longer a problem. All of these untoward complications are found in eclampsia. Why not then, use tracheotomy in eclampsia exhibiting these difficulties?

ALTERED PHYSIOLOGY IN OBSTRUCTION OF THE TRACHEOBRONCHIAL TREE

It is believed that "in a normal subject with a tidal air of 500 cc. or more, the presence of a dead space of roughly 150 cc. is tolerated without difficulty. This dead space in no way contributes to ultimate oxygenation, and represents unnecessary work. Therefore, in patients able to ventilate only with abnormally reduced tidal air, this constant dead space becomes more and more detrimental to the efficiency of the inspired ventilatory act."[17] In respiration the dead space involved consists of the tracheobronchial tree, trachea, pharynx, mouth and nasal passages. By tracheotomy dead space is reduced from 150 cc. to approximately 50 cc. and a more effective utilization of tidal air is accomplished.[17] In patients with depressed respiration or increased resistance to breathing in the tracheobronchial tree hypoxia or anoxia may develop. The latter causes an increase in capillary permeability resulting in pulmonary and cerebral edema and damage of cardiac and nerve cells. Carbon dioxide is retained in the blood, producing hypercapnia. Hypercapnia "produces headache, restlessness, apprehension, disorientation and uncooperativeness in its early stages, while high concentrations induce narcosis, anesthesia, respiratory depression and circulatory collapse."[5] Von Leden[5] believes the administration of oxygen in the presence of hyperventilation is of no appreciable value in reversing hypercapnia and acidemia, and that "the only treatment providing any real hope of success consists in removal of the obstructing secretion from the respiratory passages and reestablishment of normal alveolar ventilation."

Thus in obstruction of the tracheobronchial tree there is reduced tidal air, increased resistance to breathing, hypoxia and anoxia, increased capillary permeability, pulmonary and perhaps cerebral edema, potential damage to nerve and cardiac cells, hypercapnia and a respiratory as well as metabolic acidemia. Many vicious circles are thus established, viz:

1. Anoxemia increases capillary permeability, producing pulmonary edema, which in turn increases anoxemia.

2. Asphyxia produces depression of the respiratory center resulting in decreased respiratory efforts, which in turn accentuates hypoxia.

3. Respiratory obstruction causes increased venous intrathoracic pressure, resulting in increased intracranial venous pressure, producing edema and depression of the central nervous system, which further augment obstruction.

4. Tracheal obstruction increases venous congestion, which increases cardiac decompensation and further venous congestion.

All of these changes can be observed in the eclamptic patient with respiratory obstruction. In the past attention has been focused in eclampsia on the pathologic and altered physiologic findings in the liver, kidney, heart, brain and eyegrounds. We wish to focus attention on the hitherto neglected respiratory system. Interference with proper gaseous exchange in the lung influences the altered physiology and pathology encountered in other organs and systems. Respiratory obstruction plays a distinct part in mortality from eclampsia. Tracheotomy in addition to the usual medical regimen can prevent many of these deaths. Lund[20] has demonstrated in one case of tracheotomy in eclampsia that if the tracheotomy tube becomes obstructed, systolic and diastolic blood pressures, pulse and respiratory rates rapidly rise to alarming levels. However, once the obstructing plug of mucus is aspirated, all return to much lower levels.

DISCUSSION

Many factors enter into the problem of respiratory distress and oxygenation in the eclamptic patient. As a result of sedation necessary to control convulsions, marked depression of respiratory rate may occur. Obstruction of the tracheobronchial tree due to secretions in the trachea and nasopharynx occurs. This is especially true in comatose or heavily sedated patients. Edema of the lung from abnormal retention of fluids found in eclamptic patients or as a result of heart failure is sometimes present. Laryngospasm, occuring either spontaneously or induced by attempted passage of an airway, is frequently encountered. Occasionally on our service, we have seen exhaustion of the patient resulting from violent respiratory effort necessitating artificial respiration for varying periods of time. Respiratory distress and oxypoenia have been so marked in some cases that cyanosis was a prominent symptom. Relief from respiratory distress may be obtained in many instances by the introduction of metal or rubber airways with repeated aspirations of the nasopharynx, larynx and trachea. In addition nasal oxygen is beneficial. Some believe that the secretions become less tenacious if the oxygen is allowed to pass through alcohol[21] or 2-ethylhexanol[22] prior to its entrance into the mouth or nasal catheter. However, rubber or metal airways with suction and oxygen do not always produce desired results.

OBSERVATIONS AND RESULTS

From Jan. 1, 1946, to May 1, 1954, there have been 121 cases of convulsive toxemia admitted to the Tulane Unit, Charity Hospital, New Orleans and the Tulane Service, Huey P. Long Charity Hospital at Pineville, La.* Thus we have been responsible for the care of 121 cases of convulsive toxemia during the period surveyed. As previously stated, tracheotomy was first used on our service in November, 1950, thus we may divide this series into the pre and post tracheotomy eras. The collection of cases, their distribution, the number of times tracheotomy was utilized and the mortality rates in each period are recorded in table 1. In the pretracheotomy period Jan. 1, 1946, to Nov. 1, 1950, the mortality rate was 8 per cent. In the tracheotomy era, Nov. 1, 1950, to May 1, 1954, the mortality rate in a similar number of cases was 3.3 per cent. The mortality rate for the entire series of 121 cases is 5.7 per cent. Prior to Jan. 1, 1946, our mortality rate hovered between 10 and 12 per cent.

TABLE 1.
RESULTS IN CONVULSIVE TOXEMIA

Period	*No. Cases*	*Tracheotomy*	*Survived*	*Died*
1/1/46 to 11/1/50	62	0	57	5 (8 %)
11/1/50 to 4/1/54	59	24	57	2 (3.3%)
1/1/46 to 4/1/54	121	24	114	7 (5.7%)

In addition, tracheotomy was utilized in six cases of nonconvulsive toxemia exhibiting coma and marked respiratory distress. There were no deaths in the latter group.

As previously demonstrated, there is a trend toward a lower mortality rate when tracheotomy is utilized in convulsive toxemia. Therefore, the remainder of this analysis will concern observations and results obtained in thirty cases (table 2) in which tracheotomy was utilized in convulsive or nonconvulsive comatose patients showing respiratory obstruction. Eclampsia was found in patients from age 16 to 36 years (table 3) and gravidity and parity ranged from gravida i, para 0, to gravida viii, para vii.

TABLE 2.
TRACHEOTOMY SERIES

Convulsive	
a. Antepartal	20
b. Postpartal	4
Nonconvulsive	6
Total Cases	30

TABLE 3.
AGE

Years	*15-20*	*20-25*	*25-30*	*30-35*	*35-40*
Convulsive	11	3	4	3	3
Nonconvulsive	3	0	0	3	0
Total	14	3	4	6	3

It is to be emphasized that though the principal indications for tracheotomy are listed in table 4, all patients demonstrated marked respiratory difficulties and great increase in tracheobronchial secretions. In one case respirations had ceased entirely on admittance but were promptly resumed following tracheotomy and artificial respiration. Some patients exhibited cyanosis prior to tracheotomy. In all cases tracheotomy was followed by immediate improvement in respiration. Furthermore, it is the impression of our residents, fellows and staff that, following tracheotomy, less of the hypnotic drugs is required for adequate sedation than prior to tracheotomy or where tracheotomy was not utilized.

TABLE 4.
PRINCIPAL INDICATIONS FOR TRACHEOTOMY*

Labored respiration	18
Laryngospasm	7
Respiratory rate less than 10 per minute	1
Respiratory rate less than 5 per minute	3
No respiration on admittance	1
Total cases	30

* All cases demonstrated marked respiratory difficulties and great increase in tracheobronchial secretions. ONLY THE OUTSTANDING SYMPTOM IN EACH CASE IS LISTED.

The type of delivery and time of delivery as related to tracheotomy are listed in table 5. In four cases convulsions were postpartal in origin. Delivery was equally divided between the vaginal route and by cesarean section. Of the nine patients delivered by cesarean section, three had severe abruptio placentae as well as convulsive toxemia, three had nonconvulsive toxemia and were in severe coma with "unripe" cervices, while three had convulsive toxemia with long, rigid, undilated cervices.

TABLE 5.
DELIVERY

Type	*Vaginal*		*Cesarean*	
Tracheotomy	*Pre*	*Post*	*Pre*	*Post*
Convulsive	4	12	0	9
Nonconvulsive	0	1	0	4

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* Since July 1, 1948, the Department of Obstetrics and Gynecology, Tulane University, has been responsible for the Obstetric and Gynecologic Services at the Huey P. Long Charity Hospital at Pineville, La., as a "farming out" project. Senior residents from the Tulane Unit, Charity Hospital, are rotated through the Huey P. Long Hospital, and are in complete charge of the Division of Obstetrics and Gynecology, aided by weekly consultation visits by members of the Department of Obstetrics and Gynecology, Tulane University.

Of the patients having cesarean section as well as tracheotomy, one died on the twenty-fifth postpartal day. An abstract of her history is presented later in this communication.

Anesthesia for delivery following tracheotomy (table 6) did not present any problem. In all cases the tracheotomy tube was removed by the tenth post-tracheotomy day. The vast majority of the tubes were removed on the fifth day. There were no complications nor any case of post-tracheotomy aphasia. In no case was hospitalization extended because of tracheotomy (table 7). In eleven cases respiratory symptoms were so severe that tracheotomy was performed within one hour of admission to the hospital. The longest interval from admission to tracheotomy was forty-eight hours (table 8).

TABLE 6.
POST-TRACHEOTOMY ANESTHESIA FOR DELIVERY

	Anesthesia			
Type of Delivery	*None*	*Local*	*Gas-Oxygen*	*Spinal*
Vaginal	5	7	1	
Cesarean section		9	3	1
Postpartal eclampsia			4 Cases	

TABLE 7.
TRACHEOTOMY

Days	*2*	*3*	*5*	*7*	*10*	*11*	*12*	*12*	*14*	*18*	*20*	*21*	*25*	*32*
Tube Removed	1	4	15	7	3									
Hospitalized Post Partum	1*			4	4	5	6	0	3	2	1	1	1*	

* Died.

There were two deaths. A brief extract of each of these case reports follows:

TABLE 8.
TIME FROM ADMISSION TO TRACHEOTOMY

Hours	*0-1*	*1-6*	*6-12*	*12-24*	*24-28*	*48+*
Convulsive	11	6	1	2	3	1
Nonconvulsive	0	0	2	3	1	0

REPORT OF CASES

Case 1. B. K., a 20 years old Negro woman, gravida i, para 0, about 38 weeks pregnant, was admitted with coma, convulsions, laryngospasm, hypertension, albuminuria, edema and coarse rales throughout both lung fields. No fetal heart tones were heard and definite evidence of a dead fetus and abruptio placentae was present. Sedation was given but did not improve the respiratory difficulty, so tracheotomy was performed 45 minutes after admission. Respiration immediately improved. The following day the patient's condition was generally improved but evidence of increasing severity in the signs and symptoms of premature separation of the placenta necessitated cesarean section under general anesthesia. A severe Couvelaire uterus was encountered which would not contract following removal of the baby, therefore cesarean hysterectomy was performed. One unit of fibrinogen was administered immediately for constant ooze from the wound edges. Following administration of fibrinogen, oozing of blood stopped. The tracheotomy tube was removed on the tenth postpartal day. On the twelfth postoperative day, because of a serosanguineous drainage from the wound, the patient was taken to the operating room and the wound examined under general anesthesia. It was found that the fascia had separated but the peritoneum was intact. Secondary closure of the wound was performed. From then on recovery was steady. The patient was ambulatory on the twenty-first postoperative day. A mild generalized convulsion followed by Jacksonian type convulsions developed. During the entire postpartal course the blood pressure varied between 142/80 and 184/118. On the twenty-fifth postoperative day she had a generalized convulsion. Reconsultation with the Department of Medicine and Neurosurgery led to the diagnosis of hypertensive encephalopathy. Lumbar puncture showed clear fluid at a pressure of 330 mm. of water. There was no respiratory difficulty from the time the tracheotomy tube was removed until the series of convulsions on the twenty-fifth postpartal day at which time the patient died. Permission for autopsy was not granted.

Case 2. L. S., 21 year old para 0, gravida i, was admitted to the Huey P. Long Charity Hospital at Pineville, La., on June 14, 1951. She was approximately 28 weeks pregnant and had hypertension, edema, proteinuria, coma and convulsions. Rales were found in both lung fields. Sedation, nasal oxygen, intravenous fluids and digitalis were administered. Twenty-four hours later, the patient was in poor condition. The blood pressure was 118/60. She remained in coma and marked respiratory difficulties developed. A tracheotomy was performed with improvement in respiration but the patient died a few hours later. Autopsy showed marked edema of the brain but no softening or hemorrhage.

Tracheotomy was of benefit in the acute phase of the illness of Case 1, the patient dying thirteen days following removal of the tracheotomy tube and apparent recovery. In the light of more experience, we believe that tracheotomy should have been performed earlier in the latter case, admitting that it is a matter of conjecture whether or not the ultimate results would have been different.

SUMMARY AND CONCLUSIONS

The problems encountered in successful management of eclampsia are many and varied. Convulsions, coma, urinary suppression, hypertension, altered electroylte and fluid balance, proteinuria, edema and respiratory difficulties are manifest. In addition, problems related to time and type of delivery arise. Moreover, severe abruptio placentae is sometimes encountered. Whether or not these are terminal symptoms of an abnormal vasopressor activity,[23] there has not as yet been any specific single therapeutic agent that produces excellent results in all cases in all hands. Therapy in eclampsia is as varied as the theories of its origin. Also, we frequently have patients admitted to our service who have had little or no prenatal care and exhibit obstetric complications of an advanced degree. Respiratory distress is a symptom often encountered in our eclamptic patients. Of the five patients who died in the pretracheotomy era, four did so within twenty-four hours of admission. The other died four days after entry but all five exhibited marked respiratory distress.

No matter what basic therapy is utilized in eclampsia, be it sedation or antispasmodics, eclamptic patients still die. Many of those who die have cerebral hemorrhage. We cannot speak for services in other hospitals, but we can emphasize that of the eclamptic patients who died on our service the vast majority had respiratory distress of a severe degree. Tracheotomy is of value in cerebral hemorrhage from trauma and also in many other medical and surgical conditions in which respiratory obstruction is encountered. We believe that we have saved a number of lives by its use as an adjunctive measure in the management of eclampsia with respiratory distress, or of severe preeclampsia with coma and respiratory embarrassment. Waldrup[24] of the Independent service at Charity Hospital, New Orleans, states, "Since January 1, 1951, tracheotomy has been used in treating four convulsive toxemia patients on the Independent service. Of these four cases, tracheotomy was used in three to facilitate tracheobronchial aspiration, by-passing laryngeal obstruction, relieving marked hypoxia. The fourth was a proven case of subarachnoid hemorrhage. There was prompt relief of respiratory difficulty with improvement of oxygenation. All four cases survived. We are of the opinion that tracheotomy is definitely indicated in the treatment of convulsive toxemias experiencing respiratory difficulty and hypoxia and in cases where intracranial hemorrhage is proven or suspected."

Tatum[25] of the Louisiana State University service at the same institution declares, "During the past two years there have been five eclamptics on our service. We performed tracheotomies on two of these patients, and it is my feeling that these two were definitely benefited by the procedure. Our criterion for tracheotomies is to provide a satisfactory airway by the least traumatic method. In the two cases, repeated aspirations were necessary and it was felt that the repeated trauma of aspirations would be more deleterious to the patient than would a tracheotomy. In other words, the feeling of the department is that tracheotomies are less traumatic than the frequently repeated aspirations for the purpose of maintaining a clear airway."

From our experience and that of our colleagues at Charity Hospital, New Orleans, and cases reported in the literature, we believe that tracheotomy has a definite place as an adjunctive measure in the therapy of eclampsia.

A ready tracheotomy set should be a part of the equipment on all obstetric units. Professional personnel should be conversant with the technic of tracheotomy as an otolaryngologist is not always available when an emergency tracheotomy is necessary.

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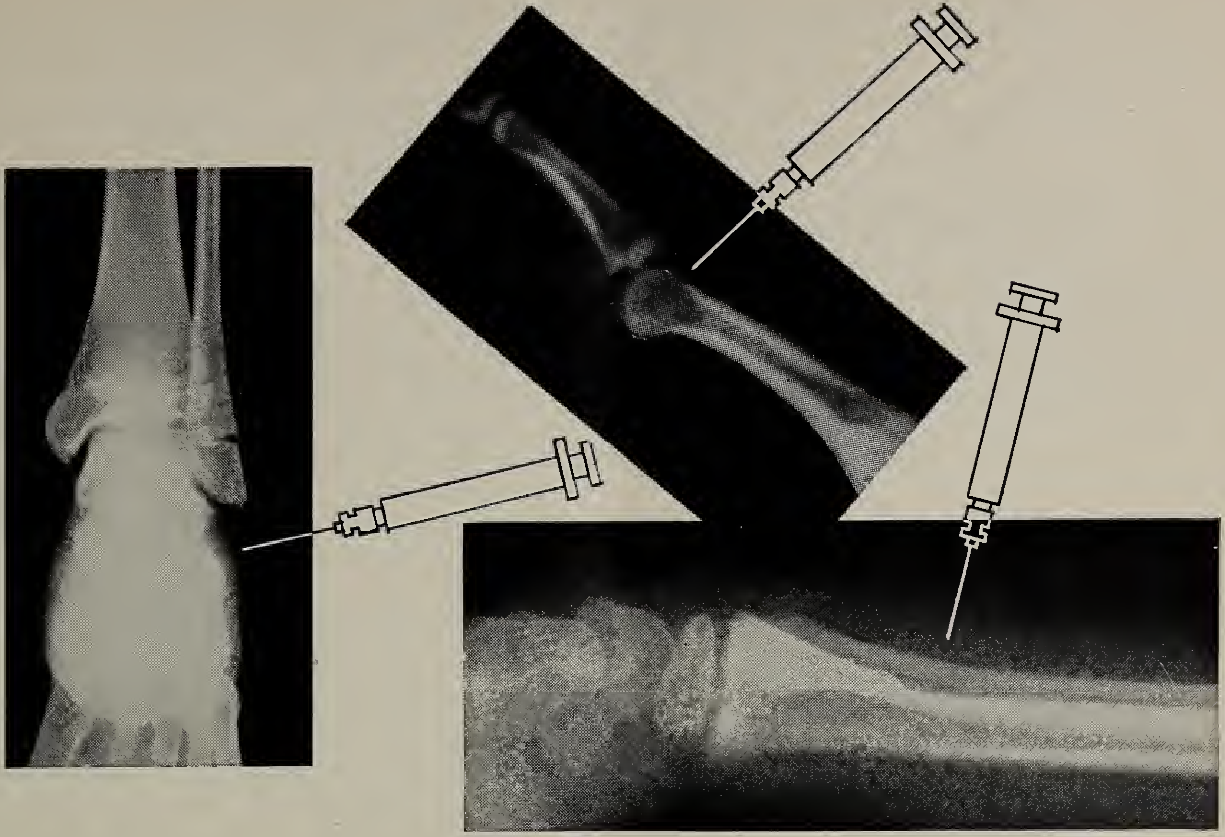

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Bleeding States of Pregnancy

Associated With Placental Abnormalities: Rupture of Marginal Sinus and Circumvallate Placenta

HAROLD L. GAINEY, M.D., and KENNETH S. NICOLAY, M.D., *Kansas City*

Bleeding complications of pregnancy, with their attendant fears on the part of the physician have, with the toxemias of pregnancy, through the years taken their toll of the emotional reserve of both the patient and the physician. The responsibility of the physician today has reached the point where an obstetrical cause for a maternal death bears little tolerance on the part of his critical associates with their analytical committees. In many areas, maternal mortality has been reduced to the point where an attempt now is being made for an irreducible minimum of fetal loss.

This discussion is provoked by experiences of the authors associated with two placental anomalies and their attendant maternal morbidity and fetal mortality, both physical and economic.

There is a distinct impression that both undergraduate and graduate teaching minimizes placental accidents and anomalies, with the exception of placenta previa and abruptio placenta. The two specific problems associated with placental accident or anomalies to be discussed are rupture of the marginal sinus and circumvallate placenta.

In this country, credit is due to Fish, Bartholomew, Colvin and Grimes[1] for the establishment of marginal sinus rupture in antenatal hemorrhage as a clinical entity to be considered in thinking of the management of this problem and its differential diagnosis from abruptio placenta and placenta previa. It is of interest to note that recent reviews of placenta previa and abruptio placenta by competent authors of extensive experience fail to mention this subject in differential diagnosis. This concept has altered the thinking to the extent that it occurs first to be differentiated from the two. In our experience with this concept, it has reduced much of the attendant fear associated with bleeding antenatally. In retrospect, we now feel that many of our previous diagnoses of abruption of the placenta, treated by cesarean section resulting in live birth, were undoubtedly rupture of the marginal sinus and today have been so interpreted and managed conservatively.

According to Fish, "knowledge concerning the existence of and possible clinical conditions referable to the marginal sinus has existed for more than a century. Jacquemier, in 1839, Duncan in 1875, Budin in 1893 and 1896, wrote concerning it. Jellett (Dublin) included torn sinus as a source of hemorrhage in placenta previa. In the American literature, there is little discussion of rupture of the marginal sinus. Eastman emphasizes the likelihood of confusing it with abruptio placentae. DeLee considered it to be a rare cause of bleeding. Other authors either fail to allude to it or do not associate it with abnormal bleeding."

The status of the marginal sinus, both clinically and anatomically, does justify further observation and confirmation. Ramsey,[2] Carnegie Institution of Washington, D. C., regarding the circulation of the maternal placenta of primates, asks, "In the first place, what does the marginal sinus look like? Even more basically, is there a marginal sinus?" This is an assumption which several qualified observers deny. "If there is one, how is it drained? And, finally, is it the sole route of placental drainage as maintained by Spanner and his followers? To the basic question, the present macaque material supplies an affirmative answer. In every placenta from an animal pregnant for more than six weeks adequate search revealed a definite and distinctive marginal sinus." By definition, "the marginal sinus is the peripheral portion of the intervillous space. It is not a separate vessel running around the margin of the placenta as is frequently assumed. It is the marginal portion of the intervillous space itself, bounded laterally by the chorionic membrane, below by the trophoblastic plate, and above gradually merging with the subchorial lake. Centrally it merges with the rest of the intervillous space. No constant septum or wall separates it from the central portion of the placenta. The structure is thus maternal, not fetal, and lies within the placenta, not within the endometrium. It is variable in size and form since its dimensions and character are profoundly influenced by the quantity of blood present in the intervillous space at any given time as well as by the pressure to which it is subjected. Villi are characteristically sparse within the marginal sinus and marantic thrombi frequently occur within it, indicating a sluggish circulation."

There has been considerable controversy and confusion in the literature as to the source of blood in rupture of the marginal sinus. Today, it is unquestionably established as being maternal in origin, and the work of Ramsey establishes this. Controversy still exists as to the drainage channels of the mature human placenta. Spanner stated "there are no central basal drainage channels in the mature placenta—or only a rare, anomalous one, and that drainage is exclusively via the

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margin." In Ramsey's study "an abundance of centrally placed veins has been seen, studied, drawn, and photographed in both the human and the macaque monkey."

In conclusion, Ramsey states, "The marginal sinus, in answer to the questions posed earlier, does exist but it is not the sole portal, in either man or monkey, through which the intervillous space drains."

Fish states, "As one examines the marginal sinus in the placenta of advanced pregnancy (which he described as having a luminal diameter varying between 5 mm. and 2 cm., a wall of thin velamentous structure) the observers are impressed with the fragility of its transparent membranous wall, as well as a greater vulnerability due to its location, with no peripheral support; and also, that it may be subject to stresses placed upon the membranes at their placental attachment. It is understandable why the marginal sinus, under stress, may fail to contain the volume of maternal blood reaching the periphery. It is likewise understandable why its rupture may be compatible with the continuation of pregnancy since, with cessation of hemorrhage, the placenta remains healthy and its implantation still secure."

Fish recognized that reconstruction of utero-placental relations, based on the site of the membrane rupture, is of questionable accuracy. It is used in their series to include low implantation, in cases of rupture of the marginal sinus. This criteria, we likewise, have used. This will be illustrated in cases to be discussed.

Examination of the Placenta.—"In cases of antenatal rupture of the marginal sinus, study of the placenta shows old or recent clot adherent to a portion of the placental margin, overlying a tear in the marginal sinus, and spreading out over the adjacent membrane, and occasionally covering a narrow portion of the maternal surface of the marginal cotyledons. Identification of a rent or slit in the sinus wall is not pathognomonic of hemorrhage from it unless a thrombus is present in the sinus at the point of rupture in continuity with the adjacent old clot. A central rupture of the membranes presumably rules out placenta previa. When the rupture site is lateral or marginal, approaching the site of sinus rupture, the detection of low implantation depends more on vaginal examination."

According to the experience of Fish, Bartholomew, Colvin and Grimes, in 147 cases of hemorrhage in the last trimester of pregnancy occurring in 2,655 consecutive deliveries, the incidence of placenta previa was 34.6 per cent; ruptured marginal sinus 33.9 per cent; abruptio placenta 9.6 per cent; circumvallate placenta 6.1 per cent; the total completed by laceration of the cervix, hemangioma of placenta; ruptured varix of the vulva and undetermined causes.

In reviewing our experience from the time the diagnosis of rupture of the marginal sinus became a factor in our management of patients to the present time, there have been 626 deliveries. For comparison, 620 consecutive preceding deliveries were reviewed to determine the incidence of placenta previa and abruptio placenta. The diagnosis of abruptio placenta was made ten times, and placenta previa six in a group with significant hemorrhage. Cesarean section was done twice for each.

TABLE I

INCIDENCE

620 PATIENTS BEFORE CONCEPT OF RUPTURE OF THE MARGINAL SINUS		
Patients with Significant Hemorrhage (2.59%)	16	
Abruptio Placenta	10	(2 Cesarean Sections)
Placenta Previa	6	(2 Cesarean Sections)
626 PATIENTS AFTER CONCEPT OF RUPTURE OF THE MARGINAL SINUS		
Patients with Significant Hemorrhage (2.87%)	18	
Abruptio Placenta	5	(1 Cesarean Section)
Placenta Previa	2	
Rupture of Marginal Sinus	11	

In the 626 deliveries since entertaining the diagnosis of rupture of the marginal sinus, abruptio placenta occurred five times, placenta previa two, and rupture of the marginal sinus eighteen times. Cesarean section was employed once for abruptio placenta and none for either rupture of the marginal sinus or placenta previa. Further review of the group with the diagnosis of rupture of the marginal sinus revealed that of the eighteen, there were eleven with bleeding of significant amount, requiring differentiation from placenta previa or abruption of the placenta. There were two of the eighteen with bleeding that was not significant, but obvious, and not terminating in labor. There were five who were asymptomatic, and the diagnosis was determined only by inspection of the placenta and membranes after delivery. For comparative purposes, it may then be said that rupture of the marginal sinus occurred in eleven instance, where differentiation from placenta previa and abruptio placenta was necessary. Without the concept of ruptured marginal sinus, all of the eleven cases so diagnosed would have been considered either placenta previa or abruptio placenta, possibly resulting in an unnecessary cesarean section.

"Considering other clinical comparisons, as to the stage of pregnancy at which bleeding occurs, it is true of placenta previa, abruptio and rupture of the marginal sinus that the frequency increases in the third trimester and as term approaches." Fish states their experience revealed that 58 per cent of sinus ruptures occurred in labor, and in 12 per cent the hemorrhage remained concealed.

"There obviously exists no tendency to recurrence of bleeding in abruptio, since this condition either terminates or demands termination of pregnancy. As for placenta previa, it is nearly axiomatic that recurrent hemorrhage is inevitable. In ruptured marginal sinus, the incidence of recurrent bleeding was 20 per cent."

In our experience, bleeding in the last trimester, in either moderate or severe degrees, brings to mind the differential diagnosis of placenta previa, abruptio placenta and ruptured marginal sinus. This latter concept has been used in the interpretation of the cause and management of bleeding and has taken precedence over the other two. Whether this statistical fact will continue will be borne out by further observation. The practical aspects of it have been worthwhile and fruitful for both clinician and patient. The outstanding characteristics are bleeding in the last trimester, preceded or followed almost immediately with the onset of pain, usually backache, intermittent contractions, crampy in nature, the bleeding subsiding and the uterine irritability, after a period of eight to twenty-four hours also subsiding. Repeated episodes occur, in many instances with backache, uterine irritability, contractions, discomfort manifested by cramp like distress and followed by bleeding. This is undoubtedly the result of formation of clots, extra-amniotic, acting as a foreign body, in the manner either of bougie or Vorhees bag. The amount of bleeding is variable, from a show of blood to 1,000 cc. or more.

The management is conservative, and after thirty-six to thirty-eight weeks, if bleeding persists, examination is recommended as for placenta previa, using the double set-up technic, with the operating room prepared for cesarean section in the event total placenta previa is discovered. Otherwise amniotomy will be followed, in most instances, by onset of labor or, in failure to respond as desired, the employment of recommended intravenous pitocin.

Prematurity and immaturity of the fetus continues to be, as in placenta previa, a problem demanding immediate attention.

A brief mention now will be made of circumvallate placenta and some practical considerations in the management of this ofttimes disabling and financially expensive placental accident. This type of placental pathology, as many other aspects of placental and cord anomalies, has been neglected in teaching as mentioned in the discussion of rupture of the marginal sinus. This non-preventable complication of pregnancy probably places on the physician only the responsibility of recognizing it as a possibility. In the subsequent management as the result of this presumptive diagnosis, the patient can be spared prolonged disability with its economic complications. Several cases discussed will illustrate this aspect. The problem itself is associated with a high incidence of maternal hemorrhage, late abortions and premature labors. The fetal loss is high. Its incidence, according to Russell J. Paalman[3] is one in 208 deliveries. Hunt, Mussey and Faber[4] reported one in 188 cases. It exists in varying degrees and in some instances is asymptomatic. The symptomatology, as statistically recorded by Paalman and VanderVeer, revealed 29 per cent asymptomatic, 51.2 per cent associated with bleeding, 26.8 per cent with hydrorrhea, 19.5 per cent with intermittent contractions, 14.6 per cent associated with third stage complications, and 26.8 per cent requiring blood transfusions. Symptomatology may well simulate that of rupture of the marginal sinus, except that it manifests itself more frequently in the first and second trimester. Bleeding is frequently associated with intermittent contractions, crampy in nature and in most instances is due to rupture of the marginal sinus caused by the placental anomaly. Third stage complications are associated with improper separation of the placenta with retention of the membranes. Probably its most expensive complication is due to the onset of labor as a result of bleeding, terminating in premature delivery.

The most important error in the management is the mistaken diagnosis of placenta previa and subjection of the patient to unnecessary cesarean section, as was true with rupture of the marginal sinus.

Bleeding from circumvallate placenta, as that from ruptured marginal sinus, is maternal in origin. Harris reported that in circumvallate placenta, both the superior and inferior walls of the sinus may be composed of decidua.

"The main threats to the fetus are abortion and premature labor." Seventeen per cent of the patients aborted before viability of the fetus, and 46 per cent had premature labors in the series reported by Paalman. Thus, a total of 63 per cent, in his experience, failed to reach term pregnancy. His fetal mortality was 29.2 per cent. This figure compares with the fetal mortality of 33 per cent reported by Hobbs and Price,[5] and 26 per cent reported by Hunt, Mussey and Faber.

Placental deficiency is the probable cause of fetal death in utero. This is due either to infarction, or to restriction of growth of the placental plate, so that the placenta is unable to meet the progressively greater demands of the fetus as pregnancy continues.

The diagnosis of circumvallate placenta cannot be made with certainty until labor is completed and the placenta inspected. However, it may be suspected. In our experience this has been true with confirmation at time of delivery. Entertainment of the diagnosis eliminates the need for continued hospitalization and absolute restriction to bed rest, thus permitting the patient to manage most of her household duties, without the need for prolonged hospital stay and expense. This will be illustrated in cases to be presented. The patient with continued bleeding after the diagnosis of threatened abortion, immediately becomes a suspect, if the pregnancy continues.

I think it is important at this time that credit be given to the work of H. O. Johnson[6] for allay-ing the fears of the physician in the management of placenta previa. Fatal hemorrhage, according to Johnson, unless it is attended by manipulation on the part of the physician, does not occur. This concept has allowed considerable latitude in the management of the bleeding complications of pregnancy and has permitted the phenomenon of rupture of the marginal sinus to be observed and carried to its successful and conservative conclusion and the ambulation of the patient who is a victim of circumvallate placenta.

COMMENT

The authors wish, again, to give credit to the excellent work done by the authors quoted and feel that much benefit will accrue to the obstetrical patient if their clinical observations are promulgated.

CASE REPORTS

Case 1. Mrs. M. G., 32 year old gravida III, para II, had had two previous pregnancies, terminating in forty weeks, uneventful labors and deliveries. Her last menstrual period was Dec. 22, 1952, and the expected date of confinement was Sept. 29, 1953. She was admitted to the hospital at thirty-four weeks gestation with profuse vaginal bleeding estimated at 1,000 cc. The onset was with backache, associated with intermittent contractions and moderate vaginal bleeding, not unlike that seen with abruptio placenta. She was taken to surgery and examined under a double set-up. No placenta was felt. She was found to be 3 cm. dilated. The membranes were ruptured and she was returned to the obstetric floor. Following an uneventful labor of seven hours duration, she delivered a 2,070 gram male infant. She was given two transfusions, which were estimated to replace the blood loss before and during her labor.

The baby expired after eighteen hours, the pathologic diagnosis being hyaline membrane disease of the lungs. The placenta was 17 cm. in diameter. There was nothing unusual about the cord or fetal surface. On the maternal side of the placenta, opposite to where the umbilical cord was attached, there was a large blood clot attached, measuring 7 by 3 by 2 cm. In addition there was a blood clot measuring 12½ by 8 by 3 cm. which was attached to the membranes above this area of the marginal placenta. This picture is characteristic of ruptured marginal sinus of the placenta.

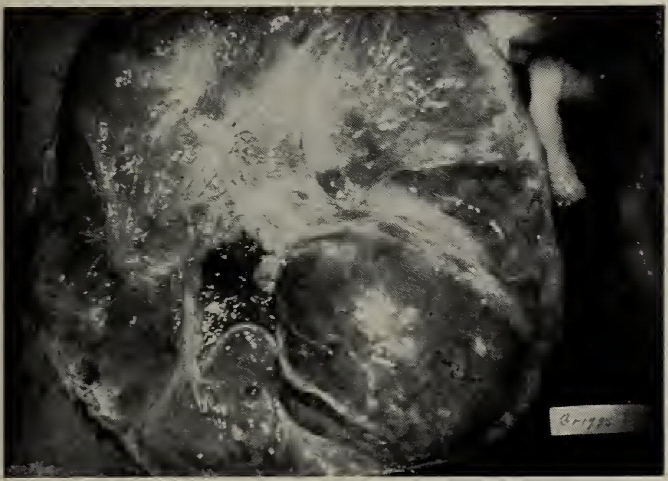

Fig. 1. (Case 1) Rupture of marginal sinus. Placenta showing central rupture of membranes. Large clot visible through membranes.

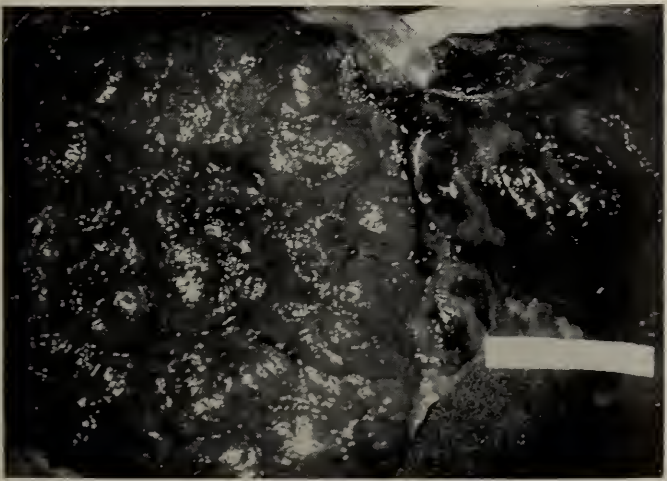

Fig. 2. (Case 1) Rupture of marginal sinus. Placenta showing clot adherent to rupture.

Case 2. Mrs. J. Y., 29 year old gravida II, para I, had last menstrual period on Sept. 4, 1952 with estimated delivery time June 11, 1953. The pregnancy was uneventful until the thirty-sixth week, at which time she was admitted to the hospital in false labor. There was no bleeding. Four days later she was readmitted with a small amount of vaginal bleeding which continued intermittently for thirty-six hours, then ceased. The bleeding recurred for a period of three days, finally ceased and she was dismissed from the hospital on May 22, 1953. Forty-eight hours later, May 24, she was readmitted with rather profuse vaginal bleeding. On examination she was found to be cm. dilated, the membranes were ruptured and after an uneventful labor of three hours and twenty-three minutes, she was delivered of a 2,975 gram male infant which was normal. Laboratory findings in the hospital were all within normal limits. The placenta measured 20 cm. in diameter with a 50 cm. cord. At one margin there was a fibrotic area extending up over the membranes and from this there was a shaggy area covered with old blood clot. This was characteristic of ruptured marginal sinus of the placenta.

Case 3. Mrs. J. N., 28 year old gravida III, para I, had an uneventful, first pregnancy terminating at forty weeks. There were no unusual findings. In 1948 she had an early, spontaneous abortion. When first seen with this pregnancy, her last menstrual period had been April 16, 1951, and her expected date of confinement, January 23, 1952. On July 6, 1951, at ten weeks gestation, she was admitted to the hospital. Following seven days hospitalization, the bleeding diminished and finally ceased. The remainder of the pregnancy was uneventful until November 31, 1951, at thirty-two weeks gestation, at which time she was admitted to the hospital with ruptured membranes. Accompanying this was a more than average bloody show. She had intermittent, irregular contractions and fourteen days later went into spontaneous labor. After an uneventful labor of five hours and seventeen minutes, she delivered a 1,730 gram male infant. The placenta showed marked circumvallation. Gross pathologic description: "A placenta measuring 15 cm. in diameter. Attached is an umbilical cord measuring 30 cm. in length, and is attached by means of a

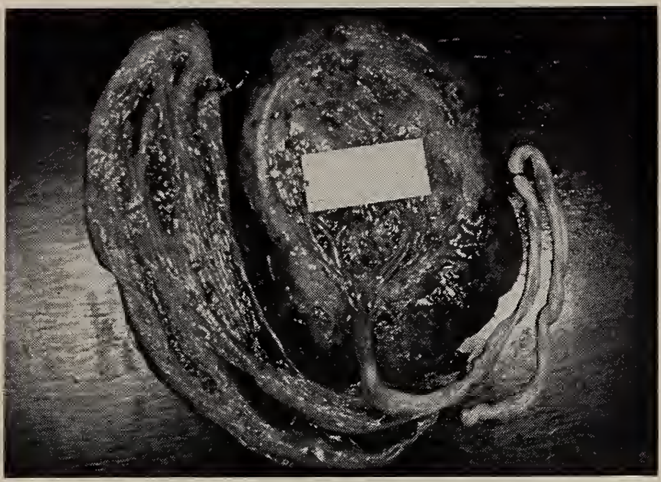

Fig. 3. (Case 3) Circumvallate placenta. Placenta showing exposure of maternal surface. Note detachment of membranes predisposing to retention of the membranes.

velamentous insertion, at a point 4 cm. from the margin of the fetal surface. The surface measures 9.5 cm. in diameter and is marked at its periphery by the presence of a yellowish gray elevated ridge averaging 1 cm. in thickness. The maternal surface of the placenta is everted and can be seen clearly when viewing the fetal surface of the placenta. Diagnosis: Placenta circumvallate with velamentous insertion of the cord."

Case 4. Mrs. M. E. M., 23 year old gravida II, para I, had an uneventful, first pregnancy terminating in thirty-six weeks with delivery of a 5 pound, 2 ounce baby. There were no complications. In her second pregnancy, the last menstrual period was June 2, 1952, and expected date of confinement, March 5, 1953. At sixteen weeks she began vaginal spotting. This continued and increased in amount. The diagnosis was suspected prenatally. The patient was advised and placed only on limited activity. At nineteen weeks the fetal heart was heard. She continued to bleed intermittently and on December 2, 1952, she was admitted to the hospital with moderate profuse vaginal bleeding. She had a series of hard uterine contractions and expelled fetus and placenta in toto. The fetus was not sent for pathologic study. However, the gross report on the placenta is as follows: "A placenta averaging 11 cm. in diameter and 3.5 cm. in thickness. The fetal surface measures 6 cm. in diameter and at its margin is an elevated dark brown opaque thickened ridge averaging 1.5 cm. in width. The margins of the maternal surface show a marked eversion so that a portion of the maternal surface can be seen when viewing the fetal surface. The latter is smooth and shows no unusual findings. The maternal surface showed no unusual findings. Diagnosis: Placenta circumvallate." This pregnancy terminated at twenty-eight weeks. She was seen again in April, 1953, having aborted a pregnancy of less than six weeks gestation. She is again pregnant, and when last seen was approximately fifteen weeks pregnant with no complications to date.

4635 Wyandotte

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Book Reviews

EMERGENCY TREATMENT AND MANAGEMENT, by *Thos. Flint, Jr.,* M.D. (Philadelphia, W. B. Saunders Company, 1954. $5.75).

Dr. Flint, the director of the Division of Industrial Relations in the Permanente Medical Group, has compiled a nicely edited volume on the emergency treatment of disease. General medical principles, specific emergency treatment, and administrative and clerical procedures are outlined briefly. Individual topics are dealt with succinctly and clearly. Large-type headings and numerical subheadings make reference easy.

More and more of this type of book are appearing in print as the United States becomes increasingly industrialized. This book belongs primarily in factories and in hospitals, where a general physician or nurse can consult it for proper treatment of a given condition on short notice and before deciding whether or not a specialist should be called. This particular volume is one of the more comprehensive of its type that the reviewer has read.

One would assume from its contents that the Permanente Medical Group has had a broad variety of experiences in such medical emergencies.—*Daniel A. Glomset,* M.D.

THE 1954-1955 YEAR BOOK OF MEDICINE, ed. by *Paul B. Beeson,* M.D., *Carl Maschenheim,* M.D., *William B. Castle,* M.D., *Tinsley R. Harrison,* M.D., *Franz J. Ingelfinger,* M.D., and *Philip K. Bondy,* M.D. (Chicago, The Year Book Publishers, Inc., 1954. $6.00).

The 1954-1955 Yearbook of Medicine, like its predecessors, is a masterful condensation of the important contributions to the world literature in the field of internal medicine during the past year.

The editors have used excellent discretion in their selection of articles, and the perspective added by the editorial comment makes for the most profitable and rewarding reading this reviewer knows of.

The progress in infectious disease, antibiotics, cardiovascular disease, hematology, endocrinology and other aspects of internal medicine is so rapid and the time required to read all the original articles so excessive that this book seems a must for the well-informed internist.—*Charles H. Gutenkauf,* M.D.

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Symposium on Arthritis

Rheumatoid Spondylitis

C. STEWART GILLMOR, M.D., AND QUENTIN CRAMER, M.D., *Kansas City*

THE TERM SPONDYLITIS is derived from the Greek word spondylas, meaning vertebra. Spondylitis is arthritis of the spine. Spondylitis may be divided into traumatic, specific infection, degenerative joint disease (osteoarthritis of the spine) or hypertrophic arthritis of the spine, and rheumatoid spondylitis.

Rheumatoid spondylitis is seen in two types. Rheumatoid spondylitis without peripheral joint involvement (spondylitis rhisomelique) in which, in addition to the spinal involvement, the shoulder or hip is involved in about 25 per cent of the cases. In rheumatoid spondylitis (spondylitis ankylopoietica) with peripheral joint involvement, the peripheral joints involved have the same characteristic clinical findings as those in rheumatoid arthritis.

History reveals spinal ankylosis in the skeleton of a man who lived in 2900 B.C. Von Bechterew described osteoarthritic spondylitis in 1893. Strumpell reported cases with gradually developing ankylosis of the spine and hip joints in 1897. In 1898 Marie described the true ascending type of ankylosing spine with early involvement of the sacro-iliac joints and gradual involvement of the spine, affecting the cervical spine late in the disease process.

Rheumatoid spondylitis is a common cause of back disability in young men between 20 and 40 years of age. It is frequently seen among the active and athletic type of youth. During World War II it was a common cause of back disability, accounting for 18 per cent of chronic backaches admitted to one general hospital.

The exact cause or etiology of rheumatoid spondylitis is not known. There is no good evidence to support it being familial but, occasionally, two or more members of the same family having this disease has been reported. The pattern of inheritance of this disease was observed in fifty families. After analysis of pedigrees and statistical tests on pooled data, it was concluded that ankylosing spondylitis could be attributed to an autosomal dominant factor, with about 70 per cent penetrance in the male and about 10 per cent penetrance in the female. Polley found it to be about nine times to one more frequent in the male sex. Specific infections, infections of the urinary tract, metabolic, allergic and endocrine disorders have little evidence so far to support them as a cause.

The pathologic findings in rheumatoid arthritis affect the connective tissue structure of the spine involving the collagen tissues. The spine is composed of the vertebral bodies, intervertebral cartilaginous disks, posterior intervertebral (apophyseal) and costovertebral joints. The only true joints of the spine are the apophyseal and costovertebral articulations; these are diarthrodial or synovial joints. The sacro-iliac joints, intervertebral ligaments, spinal root nerves and paraspinal muscles must be included in the pathologic picture of rheumatoid spondylitis.

The most important changes occur in sacro-iliac, posterior intervertebral (apophyseal) and costovertebral articulations. Early in the disease there may be a spotty loss in the contour of the sacro-iliac joints with narrowing of the joint space. Later involvement of the apophyseal and costovertebral joints is characterized by synovitis with exudation into the joint, roughening and loss of articular cartilage, and production of connective tissue with bony ankylosis as a final involvement. The process as a rule begins in the sacro-iliac joints, later involving the apophyseal and costovertebral joints in the order described. As the disease progresses there is a loss of the sacro-iliac joint space with sclerosis, demineralization of the vertebrae, sclerosis of the apophyseal and costovertebral joints and sclerosis of the longitudinal ligaments of the spine, giving the final picture of the "bamboo-spine." In a few cases, especially in women, the disease may begin in the dorsal or cervical regions of the spine.

X-ray findings, as a rule, reveal these findings. Sacro-iliitis generally is the first finding, consisting of irregularity of the sacro-iliac joints, loss of joint space with bony decalcification and final sclerosis of the joint space. Months or years later, depending on the severity of the case, sclerosis of the apophyseal and costovertebral joints, decalcification of the vertebrae and sclerosis of the paraspinal ligaments is revealed by the x-ray picture.

Laboratory findings and data show increased sedimentation rates and mild hypochromic anemia in 90 per cent of the cases. Acid and alkaline phosphatase determinations are normal. Serum protein changes, as decrease in albumin and increase in globulin, may show some change in severe and prolonged cases but generally are normal. Increased urinary secretion of 17-keto

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steroids may be present in severe cases. Spinal fluid protein level increase may be present, related more to the severity than to the duration of the disease.

The symptoms of rheumatoid spondylitis may have an onset that is insidious or sudden but usually is slow in occurrence and may show remissions. Mental stress, overwork, exertion and undue exposure to inclement weather may be a most causative factor. The patient is easily fatigued, does not have a "feeling of well being," and often complains of muscle weakness. There is a complaint of pain and stiffness after prolonged sitting, and a common manifestation is awakening after midnight or early in the morning with the thought, "I must get up, smoke a cigarette, and exercise before I can rest." There is often a loss of appetite, pain in the lower back with sciatic distribution, pain in the chest on breathing simulating pleurisy or pneumonia, and pain in the neck, shoulders or hips. Patients with spondylitis with peripheral joint involvement may show involvement of the hands, knees and ankles. In these cases characteristic findings or rheumatoid arthritis are revealed, with fusiform swelling of the fingers, enlargement of the knees, ankles and feet, showing increased joint fluid, redness and increased temperature of the involved joints.

Tenderness to percussion over the sacro-iliac area and spine is a frequent early finding. Further advanced cases reveal a rigidity of the spine with pain on rotation, restriction of chest expansion and forward bending, due to involvement of spinal joints, ligaments and muscles. Loss of the lumbar curve is common in advanced cases and a waddle gait is often present when the sacro-iliac and lumbo-sacral joints are fused. Some far advanced cases, which have not had correct treatment, walk with a severe kyphosis.

Dr. Edward Boland gives seven postulates which are characteristic of this disease and should be followed when a person, especially a young man, presents himself with a backache for diagnosis. They are:

Rheumatoid spondylitis should be suspected:

1. When a young man complains of chronic recurrent or persistent low back aching and stiffness, especially when the erythrocyte sedimentation rate is elevated.
2. When a young man complains of persistent vague symptoms, such as a tired feeling in the lower back, low back soreness, catching pains in the lower back, buttocks or hips, especially when these symptoms are accompanied by an elevated erythrocyte sedimentation rate or general systemic symptoms.
3. When a young man complains of recurrent sciatic pain, particularly if it alternates from side to side and is accompanied by aching and stiffness of the lower back.
4. When persistent back symptoms develop in a patient with peripheral rheumatoid arthritis.
5. When a patient complains of thoracic girdle pains, especially if accompanied by such symptoms as aching, stiffness and restriction of motion in the back or limitation of chest expansion.
6. When characteristic clinical signs and symptoms are present despite the absence of roentgenographic changes in the sacro-iliac or apophyseal joints or both; several months or even years may elapse before diagnostic roentgenographic changes are demonstrable.
7. When there is roentgenographic evidence of bilateral sacro-iliitis or characteristic x-ray abnormalities in the apophyseal joints.

There is no known cure for rheumatoid spondylitis but a large percentage of those afflicted can be helped toward a remission of the disease (65 to 75 per cent) depending on the severity and how early the disease process is recognized.

Early treatment should consist first of correct diagnosis, obtaining the confidence of the patient and explaining the disease process. Many sufferers are helped by knowing the cause of their difficulty, having previously been treated for pleurisy, kidney trouble, sciatica and many types of disease process not related to spondylitis.

Early medical care should consist of mental and physical rest. If possible, the job or position should be one that could cooperate with the patient's affliction.

Physical therapy, consisting of hydrotherapy, heat and massage to the back and extremities is most helpful. The patient should be instructed in breathing exercises for chest expansion, exercises of the spine for strengthening of spinal and back muscles, and exercises of the extremities especially if peripheral joints are involved.

A firm bed with a small, or no, pillow should be insisted upon with rest periods during the morning and afternoon and at least ten hours rest at night if the disease is acute or severe.

Medical and supportive treatment at first should consist of aspirin grains 5 every three hours, iron and other blood medications for secondary anemia when present. The diet should be high in protein and devoid of too many sweets and pastries. Multiple vitamins with minerals are helpful. Butazolidin in small doses is effective when aspirin fails to relieve pain. We have found 50 mg. or 100 mg. tablets, one daily, helpful in most cases needing this analgesic. Caution is advised against using this drug in patients with gastric ulcer, severe cardiac or liver disease, and leukopenia. One should watch carefully for toxic manifestations of agranulocytosis, skin rash, gastric hemorrhage and edema. It is wise to discontinue the use of Butazolidin at intervals, or when there is improvement or a remission. Frequent blood counts should be performed.

X-ray therapy is helpful in treatment for pain. Dr. Richard Freyberg has demonstrated this most successfully. Dividing the spine into five sections, or ports, and giving 100 roentgen units times 3 was found most helpful from his observations. X-ray sickness and lowered white blood cell count may occur in some cases treated. Then smaller dosage is followed in this method of treatment, because it may be repeated if needed. X-ray therapy should only be given by an expert trained in that field.

When these procedures fail Cortisone or ACTH in small dosage may be tried. These drugs may be given for periods to help in loosening the musculature while the patient is taking physical therapy. When following this routine with hormonal drugs, it is wise to observe rest periods. In our experience, only a small percentage of patients require these hormonal drugs continuously and then only in minimal dosage. In certain cases they are indicated and helpful.

CONCLUSION

Rheumatoid spondylitis should be recognized early and consistant treatment should be followed. Many patients can be helped and by careful rehabilitation be made happier and productive citizens.

1226 Rialto Bldg.

Psychogenic Rheumatism

Some Special Diagnostic and Therapeutic Considerations

OTTO STEINBROCKER, M.D., AND DAVID NEUSTADT, M.D., *New York*

An everyday problem of the practicing physician is the patient presenting musculoskeletal symptoms without demonstrable evidence of organic disease. The chief manifestations of musculoskeletal disease are: (1) pain, (2) tenderness, (3) limitation of motion and (4) muscle spasm or contraction. These signs and symptoms generally are thought to represent organic involvement. In our Rheumatology Clinics, however, we also have found these features occurring often in various psychogenic disorders. Such symptoms are commonly termed "psychogenic rheumatism." The pattern of symptoms may simulate any form of arthritis or rheumatic condition, mild or severe, especially when, by chance, suggestive laboratory data are present. In such instances the diagnosis and treatment may pose baffling and difficult challenges.

We will present briefly here some measures that we have found helpful in determining whether such symptoms truly arise from an organic disease or whether they merely are forms of somatization of emotional conflicts, or both. Obviously, the more accurate the diagnosis and the evaluation of the symptoms the more effective are the management and treatment likely to be.

Of course there is no substitute for a thorough history and complete physical examination, with careful analysis of pertinent laboratory data and roentgenograms, to establish or exclude organic disease. The vague history with protean complaints and the typical descriptions of shifting pain, for which the neurotic patient is well known, give helpful clues. When somatization occurs with little overt evidence, we have found our special methods particularly revealing. We try to bear in mind always that the patient with a psychogenic disorder also may be suffering from organic disease. Since it is not always possible to exclude underlying pathologic conditions, we must fortify our suspicion or diagnosis of a functional basis with positive information. A few special physical signs and responses have proved useful to us for these purposes.

A simple but valuable index to a psychogenic disorder is the demonstration of certain forms of cutaneous hyperesthesia. Dermal hypersensitivity may occur frequently with organic lesions (such as neuritis, bursitis) in which it usually is of regional, neural or segmental nature. This cutaneous manifestation is commonly encountered, however, in functional disorders in which it is apt to be found in a patchy distribution not following anatomic patterns, frequently at silent areas as well as at the site of complaint. In some cases an almost universal veneer of hyperesthesia of the skin may be demonstrated.

To recognize and evaluate the presence of dermal hyperesthesia the "pinch test" in our hands has become the most practical and informative method. The pinch test consists of simply pinching the skin between the thumb and the second or third fingers. It is advisable to carry out the pinching first over an area of which the patient does not complain, so that a basis of comparison may be established in the patient's mind when the affected site is examined. An evaluation of the resulting discomfort usually can be made by silently noting the facial expression of the patient, thereby avoiding leading questions. Dexterity in the use of the proper amount of pressure is acquired with practice. Supplementary testing with pin-prick may be carried out. In some indi-

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viduals with a high degree of hyperesthesia to pinch, we have noticed a normal response to pin prick. It is our impression that this dissociation generally serves as a confirmation of the functional nature of the hyperesthesia.

Another useful procedure in establishing or excluding a psychogenic basis is the use of the intradermal procaine wheal and the saline-procaine test. The first step is to delineate a tender area by palpation, pinch and scratch or prick. Having done this, a skin wheal is made with procaine in the tender skin. Palpation is then carried out over the wheal with the finger tip or the back of a pencil. If the tenderness has disappeared, it usually indicates that the soreness is due to hyperesthetic cutis rather than a lesion in the underlying structures.

If tenderness to palpation still persists, with dermal hyperesthesia eliminated, the skin wheal next is penetrated with a needle and 2 to 3 cc. of normal saline solution is deposited subcutaneously. The spot is palpated again in about three to five minutes. Any absence of tenderness and relief of symptoms following saline infiltration reflect a high degree of suggestibility common in psychogenic disorders. Should saline produce no relief, the area is then infiltrated deeply at the presumed level of tissue involvement, with 5 to 10 cc. of 1 per cent procaine solution. When it affords relief to a patient uninfluenced by saline solution, this final response usually confirms an organic disorder in these structures. Exceptional responses in each step are apt to be recognized when the examiner has familiarized himself with these procedures. In some patients with minimal underlying organic disease but exaggerated symptomatology the saline-procaine test provides an index to excessive reactions. Other simple tests to evaluate the pain threshold and the suggestibility of the patient, also requiring careful interpretation, include pressure over the mastoid tips and pinching of the achilles tendon.

Should either the intracutaneous procaine wheal or injection of salt solution produce amelioration of the patient's symptoms, these test procedures may serve a dual purpose. First, revealing information as to the suggestibility and, often, the nonorganic nature of the patient's symptoms is obtained. Secondly, when warranted, the procedure may then be converted into a frequently helpful form of suggestion therapy. By alleviating the patient's symptoms, even temporarily in this way, functional disabilities may be improved or overcome. Although it is hardly curative, placebo therapy by its palliation enables the clinician to observe the patient at regular intervals to prevent complications and to give effective reassurance and improved morale which might otherwise not be as well received or equally useful. Seemingly complete and satisfactory responses may result. However, at best, the symptoms often may recur at a later time.

It must be emphasized that a psychogenic basis should be determined by a distinct correlation between the personal history, emotional factors and episodes of complaints, as well as the symptoms and signs presented by the patient. The final, most satisfactory confirmation of the psychogenesis is to prove that the symptoms may be influenced favorably or resolved by adequate psychotherapy. Such a course is not always practical or acceptable to the patient. Many individuals, for reasons such as economics, age or language difficulty, are not suitable for intensive psychotherapy. In such cases especially any form of suggestion and reassurance that works is a contribution to the patient's welfare. Finally, whatever the management may be, if progress is not made in mild cases, or if the emotional features are severe at the onset, neuropsychiatric consultation and care are advisable when feasible.

SUMMARY

1. Musculoskeletal symptoms and signs frequently characterize psychogenic disorders.
2. To evaluate such conditions, in addition to the conventional diagnostic methods, we have found the following procedures helpful: thorough history taking and correlation of the personal data with the symptoms and episodes; the recognition and delineation by palpation and pinching especially of cutaneous hyperesthesia, either patchy and unanatomic in distribution at silent as well as affected areas or as a diffuse veneer of dermal hypersensitivity; hypersuggestible responses to an intracutaneous skin wheal or subcutaneous infiltration of normal saline solution at the hyperesthetic area.
3. When symptoms respond to these test injections, they may be used as suggestion therapy in suitable cases, at least for temporary relief.
4. Neuropsychiatric consultation and care has been helpful to confirm the psychogenesis and to provide satisfactory management in mild, refractory situations or in severe disturbances, when the patient is willing and no barriers are persented by age or language difficulty.

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Osteoarthritis

ROBERT M. STECHER, M.D., *Cleveland*

OSTEOARTHRITIS IS a degenerative rather than an inflammatory joint disease. It is characterized by deterioration and finally disappearance of joint cartilage, a smoothening and increased density of the remaining bony joint surfaces and spur formation. Limitation of joint motion or joint fixation occur only because of irregularity of joint surface with bony block, never because of ankylosis. In contrast with rheumatoid arthritis there is never impairment of general health. Osteoarthritis seems to be a local disease limited to the joint structures.

Osteoarthritis usually involves one or two symmetrically placed joints. It is rare indeed to find more joints than this affected. The hips, the knees or the fingers are most commonly affected. Although cartilage degeneration is not obvious in the intervertebral disks, spur formation of the spinal column is an osteoarthritis. A serious injury to a joint resulting in a loose cartilage or aseptic bone necrosis often initiates a process which promptly leads to severe and disabling local disease. Osteoarthritis of the hip follows injury or it seems to be due to some congenital anomaly of the head or neck of the femur. It is common in the knees in middle-aged, postmenopausal and obese women. Osteoarthritis of the spine follows repeated strain as in an active athletic career or years of hard physical labor. In many instances definite etiologic factors are never recognized.

A particular type of osteoarthritis, which has been thoroughly studied and concerning which a large mass of factual and statistical data are available, involves the finger joints—so-called Heberden's nodes. Two distinct types are recognized. In one, finger enlargement of the terminal joint promptly follows painful local injury. This is often due to being hit by a baseball or a hammer. The joint is painful and swollen. The pain disappears but the enlargement remains for the rest of the victim's life. There is always a history of injury, the enlargement becomes stabilized in several months, and only one finger is affected. This has been called traumatic Heberden's nodes.

Idiopathic Heberden's nodes arise spontaneously without injury. They start in one finger and spread gradually to neighboring fingers on both hands. They may involve not only the terminal joints but also occasionally the proximal joints. Metacarpophalangeal joints are never affected. This disease is ten times as common in women as it is in men and the incidence increases regularly with advancing years. In a survey of about 8,000 patients visiting the Out-Patient Department, the incidence of idiopathic Heberden's nodes in women was practically nonexistent before the age of 30; it averaged 0.4 per cent in the fourth decade, 1 per cent in the fifth, 2.6 per cent in the sixth, 15.5 per cent in the seventh, and 23.9 per cent in the eighth. It was about one-tenth as high in men.

Study of family histories showed that this disease definitely runs in families, that it was found to occur twice as commonly in the mothers and three times as commonly in the sisters as was to be expected in the general population. Certain combinations of familial involvement cannot be expected to occur on a basis of chance alone more often than once in five million, and another once in ten million families. Without presenting the evidence, let it be said that Heberden's nodes is a hereditary disease, sex influenced, dominant in women and recessive in men. Thus, men without showing the disease transmit it to one half of their daughters. Affected men will have only affected daughters. Gene frequency analysis showed susceptibility in women as heterozygotes to be 30 per cent, in men as homozygotes to be 3 per cent.

There is a definite though unexplained relationship between idiopathic Heberden's nodes and ovarian function. The onset of this disease was noted within three years of the last menstrual period in one half of the 100 cases studied. In other cases it was reported to have occurred as much as fifteen years after the last menstrual period, in patients following hysterectomy and eighteen years after the last menstrual period. There seems to be no relationship between idiopathic Heberden's nodes and obesity or hypertension. Patients with idiopathic Heberden's nodes complained of osteoarthritis of other joints and had crepitus of the knees more frequently than a control series. This evidence is not convincing, however, because the patients had been seen many times over a period of years while the control patients were seen only once. Patients with idiopathic Heberden's nodes do not seem to suffer from extraordinary osteoarthritis of other joints.

An intact nerve supply of the hand is essential for the development of idiopathic Heberden's nodes. This disease has developed in only the normal hand in patients who previously had suffered a stroke. The hands partially paralyzed by anterior poliomyelitis or by a peripheral motor nerve section have also been spared.

Therapy of osteoarthritis is relatively simple although it is also somewhat limited. Joint mice,

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loose bodies and aseptic bone necrosis should be removed promptly by surgical intervention to prevent cartilage damage and osteoarthritis. Obese women had best reduce to decrease the likelihood of painful knees. The treatment of the menopause has been recommended but no conclusive evidence has been presented that such measures actually prevent osteoarthritis, although it does at times relieve the symptoms of menopausal rheumatism. With well developed osteoarthritis symptomatic relief is often obtained by generous use of acetyl salicylic acid, local use of liniments and physical therapy, especially electric pads or heat lamps at home, or short wave diathermy with massage and graduated exercise under the direction of a skilled physical therapist.

Hydrocortisone injected directly into the knee or hip with osteoarthritis has proven to be highly satisfactory as it offers a good chance of marked symptomatic relief.

Osteoarthritis is a common accompaniment of advancing years. It often is disturbing, sometimes painful; it often causes limping and requires use of a cane. It practically never results in serious disability or complete invalidism.

Western Reserve University School of Medicine.

Cortisone, Hydrocortisone and ACTH In Rheumatic Disease

THEODORE B. BAYLES, M.D., *Boston*

The discovery and clinical application of cortisone and ACTH (adrenocorticotrophic hormone) constitute a brilliant and interesting chapter in medical history. It is now five years since I first used these steroids in rheumatic disease. The brilliance of the original discovery by Hench, while still glowing, has been moderated by experience. A tremendous mass of collateral physiologic data has been obtained which is of great importance but as yet has not led to fundamental advances in the search for the etiology of rheumatic disease, even though interest in these syndromes has increased greatly both by the medical profession and the laity.

For more than three years these corticosteroids (cortisone and hydrocortisone) have been generally available and have now been completely synthesized from vegetable sources so that the cost has been reduced to reasonable levels and can be given orally and subcutaneously to produce in patients a high circulating level of exogenous corticosteroids. In so far as is known, this high circulating level does not affect the fundamental mechanism or metabolic defect in rheumatic diseases but acts primarily as an anti-inflammatory or antiphlogistic agent. ACTH acts in a similar fashion by stimulating the patient's own adrenal glands to produce a high circulating level of hydrocortisone (Compound F), the form in which these hormones are secreted by the adrenal cortex. In addition, the adrenal cortex produces: (1) desoxycorticosterone and allied adrenal mineralccorticoids which control electrolytic metabolism, and (2) androgenic and anabolic hormones concerned with masculinization and cellular metabolism.

Adrenocorticotrophic hormone (ACTH) is extracted from the pituitary gland of animals and is available: as powder to be dissolved and used intramuscularly or intravenously; and as the gel which is used intramuscularly. The intramuscular preparation of the dissolved powder is usually given initially every six hours in doses varying from 40 to 100 U.S.P. units per day; as the patient improves, the time interval between doses is increased and the size of the dose reduced. Twenty U.S.P. units of the dissolved powder may be given in an intravenous drip of 5 per cent glucose in distilled water over an eight-hour period and this produces maximal adrenal stimulation even in patients said to be "resistant" to intramuscular ACTH. The gel preparation acts similarly to the intravenous route by releasing small amounts of ACTH over a relatively long period of time. From my own experience 20 units of ACTH gel every twelve hours will have adequate antiphlogistic action in rheumatoid arthritis and, subsequently, this dose can be cut to 20 units once a day or every other day.

Cortisone is available as the acetate ester: 5 or 25 mg. tablets for oral use; microcrystalline suspension in physiologic saline, 25 or 50 mg. per cubic centimeter for intramuscular or subcutaneous use; microcrystalline suspension in phosphate buffer for ophthalmic (topical) use, 5 and 25 mg. per cubic centimeter; and 1.5 per cent

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ophthalmic ointment in a petrolatum base.

I will discuss only the first two preparations. There seems little doubt that, unless there is a gastrointestinal disturbance, the oral preparation is the only one necessary for the average case of rheumatic disease. The maximal effect of cortisone by mouth is obtained within four to eight hours and rapidly declines. Therefore, I advise frequent administration of the oral preparation, i.e., every six hours, or, when the patient is unable to take or absorb the oral preparation, the daily administration of one dose of cortisone by the intramuscular route.

Hydrocortisone or Compound F is the only other steroid having anti-inflammatory action in rheumatic disease. It differs chemically from cortisone by the presence of a hydroxy group on the 17th carbon atom. Hydrocortisone possesses greater metabolic activity than cortisone so that milligram for milligram it is quantitatively more active. It is of the utmost importance to note, however, that qualitatively it differs in no demonstrable way from cortisone. As does cortisone, hydrocortisone produces a decreased carbohydrate tolerance with glycosuria; an increased excretion of total nitrogen and uric acid; retention of sodium chloride and water; potassium loss, and an increased excretion of calcium and phosphorus. Its superiority in local administration in the skin, eye or joints is probably dependent upon the fact that it is only one seventh as soluble as cortisone in body fluids and, therefore, diffuses less rapidly from the site of local action. It is available as the acetate ester: 20 mg. tablets for oral use and a microcrystalline suspension, 25 mg. per cubic centimeter, in physiologic saline solution.

Hydrocortisone acetate is well absorbed by the intestinal tract but apparently due to its relative insolubility in body fluids is not as effective by intramuscular injection. As mentioned previously, the microcrystalline suspension in physiologic saline is dispensed for local injection into bursae for bursitis and into joints for noninfectious inflammatory joint disease.

One cannot proceed with remarks on the clinical use of these preparations without listing first the conditions which contraindicate steroid therapy. They are:

(1) severe diabetes mellitus, (2) hypertension, (3) congestive heart failure, (4) tuberculosis, (5) latent infectious processes, (6) peptic ulcers, (7) senile osteoporosis and (8) mental disorders.

The early enthusiasm for these steroids in rheumatoid arthritis has diminished for two significant reasons. First, these substances are not curative and, secondly, in adequate doses they produce physiologic effects which are intrinsically abnormal for the human body and often dangerous, especially in older patients. Despite these objections, I feel that these medicaments are of great help in:

Group I: Adults or children severely and even dangerously ill, i.e., those who are losing weight, unable to eat, having a severe febrile course and obviously going downhill to chronic invalidism at a rapid rate.

Group II: The bedridden or chronically crippled patients in whom the physician plans a definite program of rehabilitation aided by physiotherapy, joint manipulation and occupational therapy. These patients are often unable to start on a therapeutic program without the initial help that steroid therapy will give them.

Group III: A relative few ambulatory young patients who fail to respond to rest, salicylates, gold, psychotherapy, physiotherapy and orthopedic care can be made more comfortable. They can lead more useful lives, and happier ones. One must remember that increased activity by patients with less acute joint symptoms may produce rapid damage to weight bearing joints.

The dosage in these three groups will vary from 50 to 150 mgs. of cortisone a day or from 40 to 140 units of ACTH in gel per week. Parenthetically, I should state that children require the same or greater doses of steroids regardless of body weight. In my own clinic large doses of cortisone (500 mg. per day for two to four weeks) have failed to "cure" rheumatoid arthritis.

Rheumatic fever, with or without carditis, should be treated intensively with cortisone (200 mg. per day) or ACTH gel (20 units twice a day) for three to four weeks, then the dosage slowly reduced to none. Rheumatic fever is a self-limited disease as compared to rheumatoid arthritis and on occasion a "cure" seems to be accomplished.

Only the acute attack of gout can be treated profitably with steroids and concomitant colchicine therapy may prevent the post therapy exacerbation.

In our hands lupus erythematosus disseminatus has proven resistant to steroid therapy except as in so far as the acute episode may be aborted; sometimes massive steroid therapy is necessary to accomplish this.

Experience with dermatomyositis and polyarteritis nodosa is limited but I favor vigorous early treatment in these conditions as suppressive or tardy treatment has been unsuccessful.

With the discovery and availability of cortisone and ACTH, a fascinating and worthwhile era of clinical medicine has begun. Only with continued observation and study will the final chapter be written.

Harvard Medical School

Rheumatoid Arthritis

The Need for Individualized Therapy

BERNARD ROGOFF, M.D., *New York*

THERE HAVE BEEN several notable advances recently which have improved the treatment of many patients with rheumatoid arthritis. Even so, the management of these patients requires a highly individualized program of well integrated treatment. Such a program needs to be patterned with several objectives in mind and differs from patient to patient depending upon factors such as the activity of the disease, the degree of joint damage, the limitation of function and the rate of progress of the disability. The program should be flexible and altered as conditions of the disease change.

In addition to well known objectives of treatment, namely, relief of discomfort, correction of deformities and improvement of nutrition, one of the most important objectives is the arrest of the progress of the disease. Since the etiology of rheumatoid arthritis is still unknown, the problem obviously is difficult. ACTH and cortisone have been used successfully in many cases. These drugs possess a potent antirheumatic effect. However, the benefit can be maintained only for periods of time during which the hormone is administered properly. With cessation of therapy, relapse is invariable. The speed and degree of this relapse is unpredictable.

It must be kept in mind that these hormones are suppressive and not curative. The basic pathologic processes continue unaltered when the hormonal suppression is lifted. If the cessation of therapy is abrupt, a withdrawal syndrome may be initiated. This is manifested by increased aching of bones, joints, muscles and other fibrous tissues. Weakness is profound and often the patient becomes bedridden. There is a notable resistance of the symptomatology to the usual relief measures of physiotherapy and analgesics. The appearance of the emotional letdown becomes a distressing problem to manage. The patient appears depressed, discouraged and despondent. It takes a physician well versed in the art of medicine to change this passively dependant invalid to the more aggressive, hopeful patient that is required for the successful future management of the patient. Many of these withdrawal states may be attenuated by the slow, gradual reduction of hormone therapy. In an effort to minimize the undesirable side effects of hypercortisonism we have discontinued the initial large doses and have tried to be content with slower and less complete relief. The frequency of undesirable effects, the well known contraindications and the problem of the withdrawal syndrome have sharply limited the usefulness of these drugs. Our experience has shown that in 10 per cent of our patients the use of ACTH or cortisone has been considered wise.

The intra-articular injection of hydrocortisone (compound F) is indicated in controlling the disability from arthritis. This steroid has been shown to possess anti-inflammatory properties when injected into the involved joint. However, its usefulness is diminished when more than one or two joints are incapacitating. It must be considered only as adjunct therapy. It does not replace systemic treatment.

The physician must remember that rheumatoid arthritis is a generalized disease and should be treated as such. In planning the management for these patients, new measures of treatment should not blind the physician to other measures of therapy proven to be of value. The time honored use of heat, rest, exercise and salicylates has not been displaced. Attention should be given to diet, with vitamin and mineral supplements when indicated. Orthopedic measures such as splinting, bracing, corrective shoes and reconstructive surgery should be considered.

The use of gold salts in selected cases is an important part of the therapy of rheumatoid arthritis. The incidence of toxicity can be maintained at a low level with proper dosage and frequent clinical and laboratory checks. In patients with active synovitis a high remission rate can be anticipated. The benefit may be prolonged and relapses prevented by constant maintenance therapy.

In a chronic disease such as rheumatoid arthritis, management must be directed from many different phases. Any therapeutic measure that will ameliorate symptoms without danger to the patient is acceptable. Among recent new analgesics, phenylbutazone (butazolidin®) has been given much attention. It is encouraging in the control of symptoms. But like other potent drugs the list of toxicity reactions is impressive and includes rashes, sodium retention with edema, nausea, gastrointestinal hemorrhage, insomnia and bone marrow depression. The action of this drug is prompt, benefit being apparent within several days. There appears to be no advantage in continuing the drug beyond a short period of time if no benefit has occurred.

Awareness of the emotional problem in this disease on the part of the physician is the first step to psychotherapy. The patient should be encouraged to air his problems. He should be made to feel that the doctor does not think of him solely as a patient with joint disease, but considers him and is interested in him as a human being. The physician-patient relationship can be strengthened by an attitude of sensible, aggressive, openminded, honest optimism on the physician's side.

In this brief résumé it should be evident that the physician managing a patient with rheumatoid arthritis has many more aids at his disposal and because of this the patient can be considerably benefited. The problem of the physician does not become easier. He must become more selective. The therapy should fit the patient. The personalized, individualized program becomes all important. The physician who seeks routine therapy is bound to fail.

Hospital for Special Surgery.

The Orthopedic Treatment of Chronic Arthritis

JOHN G. KUHNS, M.D., *Boston*

The deformities in the joints and the disabilities in function which accompany chronic arthritis usually require special treatment. It is the purpose of orthopedic measures to prevent deformity and to regain and to improve function when it is lost. Orthopedic measures include the development of good posture, the prevention of deformity, the maintenance or recovery of muscular strength and articular movement, the correction of deformities and disabilities by apparatus, by manipulation and by surgical procedures and, finally, assistance in rehabilitation in returning the patient to his place in the community. While these measures are used most frequently in rheumatoid arthritis, the same mechanical principles can be applied to all other forms of arthritis in which deformities occur.

Good posture, the habitual proper alignment of the body is important for recovery in chronic arthritis. The healing of the articular inflammation in the joints requires that the joints be used in normal alignment and that strain be avoided. Improvement in posture begins with proper resting positions in bed. The patient should be on a firm bed and in most instances only one pillow should be permitted under the head. Positions which will tend to produce deformities should be avoided; the back and neck should not be in ventral flexion for prolonged periods nor should the arms and legs be held constantly in a bent position. When the patient is able to sit up the entire back should be supported in bed or chair with no bend at the waistline. Exercises are given in deep breathing and in developing coordination in the muscles which hold the body erect against the forces of gravity. These postural exercises are first given in recumbency and later are performed in the sitting and standing position. Any persistent local postural deformity is corrected by exercises for that special portion of the body. Such exercises are discontinued when good alignment of the body can be maintained habitually. In older individuals, particularly, aid often must be given temporarily or permanently with braces or corsets to maintain good posture.

It is easier to prevent deformities in chronic arthritis than to correct them after they have developed. Deformities commonly occur from muscular spasm which follows articular inflammation. Deformities result in persistent flexion both in the spine and in the extremities. Pressure of bed clothes, a sagging bed and faulty resting positions of the arms and legs also favor these deformities. In preventing deformity one must first relieve muscular spasm. To accomplish this the inflamed joints must be splinted or protected. If there is only a small amount of swelling a firm bandage may be adequate splinting. A somewhat firmer type of splinting is adhesive strapping. Both of these are frequently used in ambulatory patients. A more effective form of splinting is a plaster cast. Plaster splints about eight layers thick are adequate for the upper extremity. Circular plaster casts are commonly used in the lower extremity. Various types of plastics and of metals have been used for splinting but are not as adaptable or satisfactory as plaster of Paris.

The plaster casts are molded to the entire limb in a comfortable position. No motion is permitted in the inflamed joints. After such splinting the muscular spasm abates, pain often disappears and sedatives are not required. Usually within a week the limb can be brought into a less deforming position. A new cast is then applied and further casts are made until the deformities are corrected. For arthritis of the spine a plaster jacket is commonly used. These jackets are changed like other casts when the spine can be brought into a straighter (less bent forward) position. Then the limb is put in the position of optimum function, the best position for rest, until the articular inflammation subsides. Experience has shown that the most satisfactory resting positions in the fingers is that of 20 degrees of flexion; in the wrist 30 degrees of dorsiflexion with the carpal arches molded so that a flat hand will not result.

The elbow is held in about 70 degrees of flexion. The shoulder joint is held during the acute stage of inflammation in 90 degrees of abduction; later it can be carried by the side. The spine is held fully extended. Here good posture is the position which leads to best function. In the lower extremity the position is that of full extension with the foot at right angles to the leg, the position of standing and walking. These resting splints are worn all of the time at first. As the patient becomes relatively comfortable they are worn only at night and are discontinued when all muscular spasm and soreness are gone.

With splinting during active inflammation in the joints, heat and exercises are used to hasten the return of function. Heat is applied to the inflamed joint for periods of about one half hour two or three times a day. This lessens pain, helps in the absorption of articular exudate and allays muscular spasm. The simple forms of heat, either moist or dry heat, are just as effective as the more elaborately prescribed ones. Just as soon as motion can be performed without pain, exercises and other activities are prescribed to prevent muscular atrophy and to preserve articular motion. Exercises should never be painful. Forceful pulling upon inflamed joints does more harm than good.

Active exercises are prescribed throughout the painless range of motion in the inflamed joints. This range of motion increases as muscular spasm lessens. Any activity that causes prolonged pain is harmful and should be avoided. Exercises are made more strenuous as the patient improves.

If deformity has not been prevented or corrected by splinting, more vigorous measures must be employed. Continuous traction will occasionally correct deformity at the neck, shoulder, hip and knee. This is less comfortable than casts. The use of stretching apparatus or wedged casts is not recommended. They often increase inflammation in the joints. If no improvement occurs after wearing a properly fitting plaster cast for several weeks, the deformity is subjected to a gentle manipulation under anesthesia. The anesthesia employed is usually intravenous pentothal sodium. With short leverage the deformed joint is gently stretched. No great force is used because the bones in chronic arthritis are atrophied and may break easily. After manipulation the limb is placed in a plaster cast as fully corrected as possible and is kept there until soreness subsides. Then exercises and other treatments are resumed. Sometimes several manipulations are required to correct the deformity. When no improvement follows, manipulation operation must be considered.

Before operation is contemplated the general condition of the patient should be good and the arthritis should be clinically quiescent. The patient should be emotionally stable and cooperative. There should be adequate facilities in the hospital for the specialized surgery required and for the prolonged postoperative care.

Surgery should be considered only as an adjunct in the treatment of arthritis. Surgery is employed to establish a diagnosis, to relieve pain, to improve the position of a part of the body and to recover function in a joint. Arthrotomy or biopsy about the joint is sometimes required for diagnosis, particularly if the disease remains in one joint for a prolonged period of time. Usually diagnosis has long been established before operation is considered.

Operations to relieve pain are employed less and less frequently as more effective measures to improve function are developed. In the surgical relief of pain, sensory nerves to the articular capsule are interrupted or motion in the joint is obliterated by a fusion of the articulation. These are palliative procedures and do not improve function. The most frequently applied procedures for improving the position of a limb and for correcting deformity is the cutting of tight fascia and articular capsule and the lengthening of contracted muscles and ligaments. Such procedures are used most often at the knee joint. A less common procedure for correction of fixed deformities is osteotomy, cutting and correcting the position of the bone near the joint. Osteotomy is being replaced more and more by arthroplasty which not only improves the position of the limb, but regains or improves function in the joint as well. Arthroplasty can be performed in chronic arthritis with the expectation of a useful, painless joint at the hip, knee and elbow. At other joints good function is possible with a stiff joint in a good position for use. No operation alone in chronic arthritis will secure a good end-result. After operation a prolonged period of retraining is essential for the development of good function.

After strength in muscles and a useful range of motion in the inflamed joints have been regained, the task of the physician is not completed. The patient must be returned as a useful member of society. Often this will mean careful watching with gradual removal of protection in his former employment. However, the chronic arthritis not infrequently leaves permanent damage in the joints and a less strenuous vocation, commensurate with the patients' physical ability, must be found. Agencies in the community must be employed in vocational guidance and training. Practically all of these crippled people can be employed profitably again in any understanding, intelligent community.

Orthopedic measures to prevent or correct deformities and disabilities are some of the useful measures employed in the treatment of chronic arthritis. They should be used in combination with many other measures to improve the general well-being of the patient and to hasten the subsidence of his disease. The employment of these measures will prevent most of the disability which occurs in chronic arthritis.

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Postgraduate Review

Plasma

J. GARROTT ALLEN, M.D., *Chicago*

PLASMA TRANSFUSIONS play an important role in the rehabilitation of patients with hypoproteinemia and in the prevention or treatment of shock. Although plasma volume expanders, particularly dextran, has received considerable attention as a substitute for plasma in the treatment of shock, the rapid correction of hypoproteinemia in patients unable to eat has not yet been accomplished by any intravenous nitrogen bearing fluid other than plasma or serum albumin.

However, during the last few years, the transfusion of pooled plasma has been largely abandoned because of the fear of homologous serum jaundice among its recipients. This concern was justified on the basis of experience which accrued from the transfusion of pooled plasma which had been lyophilized, frozen or refrigerated. These storage procedures favor survival of virus activity. Experience demonstrates that this conclusion does not apply to liquid pooled plasma stored at room temperature six months or longer prior to its administration. At room temperature and in a liquid cell-free state the virus becomes nonpathogenic. The usual source of infection by the virus of homologous serum jaundice is the "carrier" donor who gives no history of either jaundice or hepatitis. Moreover, the carrier usually does not subsequently develop clinical manifestations of hepatitis. It is believed that the "carrier" donor is encountered in one of 200 to 300 healthy donors.

Pooling of plasma increases the chance for encountering the "carrier" donor. Within limits the likelihood of virus contamination of pooled plasma is roughly in proportion to the number of donors constituting a given pool. Since there is no means for detecting which donor is a carrier of the virus, transfusion, whether of blood or plasma, must be considered a potential hazard. The attack rates of homologous serum jaundice among patients receiving dried, frozen or refrigerated pooled plasma has been reported between 5 to 20 per cent, whereas the attack rate for transfusion of whole blood alone varies between 0.5 and 1.0 per cent.

Because of the importance of plasma to National Defense as well as to care of the patients in the community hospital, much time and effort has been devoted toward a solution to the problem of homologous serum jaundice in plasma. The ideal achievement would be the development of a viricidal procedure that could safely be used for blood as well as for plasma. Some progress has been made toward this end. As yet, however, no technic has been established which is both suitable and safe in freeing blood from the risk of homologous serum jaundice. In the case of plasma, more success has been encountered.

In general viruses respond in fairly constant pattern to certain aspects of their environment. Most virus agents have their best chance for survival when stored in the lyophilized or dried state. Their activity is also well maintained in the frozen or refrigerated states. The duration of survival of any virus under either of these three conditions varies considerably from one virus to another. Since pooled plasma has been stored in large quantities in the lyophilized, frozen or refrigerated states, without regard to virus contamination, it should amaze no one that these types of plasmas have maintained their pathogenicity for considerable, if not indefinite, periods of time and that patients receiving such plasma preparations should continue to develop this complication. These procedures, therefore, are to be condemned until plasma free of the virus of homologous serum jaundice has been prepared.

Many viruses, not so resistant as the virus of homologous serum jaundice, have been successfully inactivated by exposure to ultraviolet light and to certain chemical agents. Ultraviolet light exposure of pooled plasma has been extensively used, but without notable success in reducing the attack rate of homologous serum jaundice. At present, certain chemical agents, including the nitrogen mustards, sulfur mustards and beta proporiolactone, have been added to blood and plasma in the hope that these agents, viricidal for certain viruses, would also be viricidal for the virus of homologous serum jaundice. However, their effectiveness as a viricidal agent for the virus of homologous serum jaundice requires a concentration which approaches toxic limits. These or similar compounds eventually may become suitable for the safe sterilization of blood, but this end has not yet been achieved.

For many years it has been common knowledge that most, if not all, viruses are labile and are inactivated upon prolonged standing in a liquid cell-free medium at room temperature. To this end, virologists have avoided allowing virus agents to stand under these conditions lest virus activity be lost and their studies inconvenienced. Whereas this feature of virus survival has often been a distressing problem to the virologist, it has been used to good advantage in the preparation of pooled plasma. Pooled plasma stored in liquid state at room temperature for six months or longer loses its ability to produce homologous serum

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jaundice. This storage procedure does not disturb the proteins of plasma important in the treatment or prevention of shock and for the correction of hypoproteinemia in patients unable to eat. Thus, by employing a simple principle already thoroughly established, many blood banks have been able to prepare plasma with little or no risk of homologous serum jaundice.

At the University of Chicago Clinics during the last twelve years, plasma has been pooled and stored in a liquid state for six months or longer prior to administration to patients. No cases of homologous serum jaundice developed which have been attributable to this plasma. During this same period, whole blood transfusions administered from the blood bank have produced fifty cases of homologous serum jaundice, giving an attack rate of 0.5 per cent. Our experience with whole blood in this respect has been the same as that reported by others. On the other hand, our experience with pooled plasma has been contrary to the experience of all who have used frozen or refrigerated pooled plasma where the attack rate of homologous serum jaundice from such plasma has been thirty to fifty times that for blood.

THE STABILITY OF PLASMA PROTEINS IN A LIQUID STATE AT ROOM TEMPERATURE STORAGE

It is a fortunate fact that citrated pooled plasma, stored at room temperature, is stable to a remarkable degree and for a much longer period than is the virus. No important electrophoretic changes appear to occur short of three year's storage. After three years some reduction in both the beta and gamma globulins takes place. These are the larger size protein molecules. They appear to cleave with a resultant molecular size approximating that of serum albumin. The albumin contained in our plasma appears stable for at least ten and one half years, which is as long as these physical studies have been made. The clotting components, however, are lost and no longer are useful. This seems unimportant in that fibrinogen and antihemophilic globulin and possibly other fractions can be prepared and administered from the few patients suffering from these particular deficiencies, although most of these factors continue to transmit the active virus when present. In metabolic studies we have observed no demonstrable alteration in the plasma protein response to plasma transfusions when the plasma given has been aged for three years in comparison to six months old plasma.

THE CORRECTION OF HYPOPROTEINEMIA BY PLASMA TRANSFUSIONS IN PATIENTS UNABLE TO EAT

Studies demonstrate that hypoproteinemia can best be corrected in patients unable to eat by the daily transfusion of a liter of plasma administered consecutively for three to seven days. Because the surgical risk in hypoproteinemia is greater than in the patient whose plasma protein concentrations are normal, operative procedures which often may be curative can be carried out with greater safety after correction of the hypoproteinemia by plasma transfusions. As soon postoperatively as the patient can consume oral feedings, a diet high in proteins, carbohydrate fat and vitamins should be administered. Soon, thereafter, plasma and blood are no longer needed. The amino acid hydrolysates afford considerable assistance in maintenance of a positive nitrogen balance when given intravenously, but the positive balance is but a small percentage of that which can be accomplished by an equal amount of nitrogen administered as plasma.

In addition to the osmotic effect of plasma proteins, it also is important in that certain electrolytes, particularly calcium, potassium and phosphorus are in part bound to plasma proteins as well as cellular proteins. In hypoproteinemia, calcium deficiency, potassium deficiency and phosphate deficiencies may develop and remain refractory to the administration of these ions until the plasma protein concentration is restored toward normal. More recently, the intimate association of body proteins as well as the plasma proteins with these mineral ions has received more prominent attention. It has long been recognized that deficiencies of these minerals may account for some of the serious sequelae observed in certain metabolic disturbances.

The importance of plasma transfusions in all fields of medicine has not yet been fully appreciated. Whereas, the fear of homologous serum jaundice from plasma that has been dried, frozen or refrigerated has been justified, it is not warranted for liquid pooled plasma stored at room temperature for six months or longer prior to use. Until a better method is available this procedure offers a simple technic that can be employed by any blood bank capable of employing scrupulous aseptic technics. It will make available to patients an important form of therapy for which no substitute has been developed.

The one obvious defect in this method is the need for carefully controlled bacteriologic studies to assure the sterility of the final product. Blood banks without these facilities should not undertake the room temperature storage of liquid plasma. That bacterial contamination is not an insurmountable problem is attested by the fact that more than 200 blood banks are now using this procedure successfully in plasma preparation. Their experience indicates that contamination, when it does occur, takes place nearly always at the pooling stage. This suggests that blood may be contaminated because of poor skin preparation at the site of venapuncture, or that bacteremia is occasionally encountered at the time of donation in some patients. Of the blood banks I know about, bacterial contamination occurs among 1 to 11 per cent of plasma pools prepared.

950 E. 59th St.

Case Report

Bell's Palsy

Treated With Hydrocortisone and ACTH Gel

JOHN H. WALTERS, M.D., AND LAURA WALTERS, M.D., *Columbia, Mo.*

As LATHROP[1] noted in his paper on affections of the facial nerve, no universally effective therapy was known for Bell's palsy until the recent past. Rothendler[2] appears to have been the first to treat this illness successfully with Cortisone; following this, reports have appeared by W. P. Robinson and B. F. Moss,[3] Rothendler[4] and Robbins.[5] These reports total ten patients of whom only one (who had evidence of nerve atrophy by faradic tests) failed to respond. As Robinson and Moss[3] point out, only Swan[6] has attained similarly good results with neurosurgical stellate blocks.

That treatment with Cortisone is highly successful and constitutes the specific treatment of Bell's palsy was suggested in an annotation in the Lancet.[7] The lack of success with Cortisone in the treatment of this condition in some cases can not always be correlated to the duration of illness prior to the start of therapy. Whitty[8] reports treatment of five cases beginning from twelve hours to four months after onset with disappointing results. Rothendler's,[4] Robbins'[5] and Robinson and Moss'[3] more favorable results may have been due to the much larger doses of Cortisone (up to 600 mg. on the first day of treatment) used by them.

We recently had a case under observation in whom the response to treatment after nine days of Hydrocortisone therapy was unsatisfactory. The dosage of (oral) Hydrocortisone used was more comparable to that used by Whitty[7] as was also the initial poor response. A change of medication to injections of repository ACTH (Acthar-gel®) brought prompt and most gratifying results.

CASE REPORT

Mrs. T. W., a 21 year old housewife, who stated that she had always been in excellent health, on the evening of December 2, 1953, began to be bothered by a severe left sided headache which appeared to be most intense behind the left ear. The patient recalled faintly that a few days before this she had been exposed to sharp blasts of cold wind while hanging up the laundry. When she awoke the morning of December 3 she found that the left side of her face was paralyzed.

Physical Examination revealed a complete paralysis of the facial muscles of the left side. The left corner of the mouth drooped and the left nasolabial fold was flattened. The patient was unable to close her left eye. The palpebral fissure on the left appeared widened. The corneal reflex on the left was absent although response was noted on the right to left corneal stimulation indicating motor reflex rather than sensory reflex loss. The patient was unable to whistle or blow up her cheek. She was afebrile and repeated examination of ear, nose and throat did not reveal evidence of any local disease. The patient was started on injections of 1,000 mc.gm. B 12 daily on December 3 and these injections were continued until December 14. On December 5 it was decided (after we had convinced ourselves that the patient was free of any pyogenic process) to begin treatment with Hydrocortisone. Treatment was begun with 80 milligrams of Hydrocortisone orally on the first day, 60 the second, and 40 milligrams of Hydrocortisone daily from December 7 to December 14. During this time the only noticeable improvement was a minimal increase in ability to close the left eye, which had to be protected by frequent lavage and an eye patch. Because of the unsatisfactory progress and because of previous personal experience in the treatment of some allergic disorders in which it was felt the ACTH gel sometimes accomplished what Cortisone could not, it was decided on the 15th of December to discontinue all previous medication and start the patient on ACTH. On that day 20 units of Acthar-gel® were given and this was followed with injections of 10 units on December 16, 17, 19 and 23. The improvement following institution of ACTH therapy was prompt and dramatic. On the 17th it was found that the patient was able to close her left eye, blow up her cheek and to whistle weakly. On the 23rd the only residue of paralysis noted was some but not complete inability in wrinkling the left side of the forehead. On that day all therapy was discontinued and the patient was seen again and found to have fully recovered on December 28, 1953, and was well when last heard from on January 13, 1954.

CONCLUSIONS

This case is being brought to attention because of its discouraging response to Hydrocortisone and the dramatic change brought on following the start of ACTH therapy. It has been our personal impression for sometime that not infrequently good results may be obtained with that preparation when Cortisone had failed. Although no conclusive proof can be presented that the clinical course was altered by the treatment given in this case, this appears highly probable. Larger doses of Hydrocortisone or Cortisone than used by us would appear indicated if those drugs are chosen. It is hoped that ACTH and Cortisone will prove valuable tools in the future treatment of Bell's palsy.

SUMMARY

Rapid recovery of a patient suffering from Bell's

50 *and seven*

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palsy following institution of ACTH treatments is reported after relatively small doses of Hydrocortisone had been ineffective.

22 North Eighth St.

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ORGANIZED MEDICINE IN CLAY COUNTY

The Clay County Medical Association was so named before the less ponderous word "Society" was in general use. It is the second oldest organization of medicine in the State of Missouri, being founded in 1854, according to the best available data. It is, therefore, in its 100th year of progress and yields only to the St. Louis Medical Society in the point of age.

The single qualification for membership in this association, as tersely expressed in the first by-laws, was "A reputable physician of Clay County, Mo." Reputation was the sole requisite. It embodied graduation from an established institution of learning (medical), with a character that knew no accusing finger. To "fall from grace" meant charges preferred, calm deliberation, and certain expulsion, if the charges were sustained. Probation, or the smearing over, or counsel with the unethical malefactor were unknown and unthinkable.

The objects of the association were comprehensive: "To constitute a representative body of the regular profession of Clay County, which may advance the interests, and encourage the unity and harmonious action of the profession; to suppress empiricism as much as possible; to restrict the privilege of practicing the profession of medicine to qualified graduate; to develope talent; to stimulate medical invention and discovery; and to maintain our rights and immunities as medical men."

The financial requirement was one dollar annual dues from each member. The first official roster is dim and yellow with age. It tells that Dr. C. H. Morton was the first president; no vice-president is mentioned; and Dr. Stephen Ritchey was secretary. The charter members were: Drs. John M. Allen, Joseph M. Wood, James B. Snail, Hermon S. Major, W. H. Gorin, William Everett, and a Dr. Garlichs. The monthly meeting place was Liberty, Mo.

Medical invention and discovery were indeed invited. Many a keen and discerning mind read the suffering face, and analyzed the doubtful symptom. . . . Many an alert finger searched the wavering pulse, and at the next meeting of the Society, the language of suffering was translated into methods of successful procedure. It is to be regretted that the deeds of these noble men were not chiseled into the imperishable rock, that the record might be a source of perpetual stimulus to their successors.

Membership and enthusiasm are the chief essentials to the success of any medical organization. There are times when both are hard to maintain, hence there were intervals when attendance upon and interest in the meetings languished—but never died. One of the older members remembered the time when he was president, secretary, general manager, and a quorum of this thing and they did business right along. The secretary is considered the man at the throttle. Only ten secretaries have served this organization, during this 100 years.

The present membership of the Clay County Medical Society is made up of forty-one participating physicians and two associates. The official roster for 1954 is: President, Dr. Robert H. Parker of North Kansas City; Vice-President, Dr. R. D. Dwyer of North Kansas City; Secretary-Treasurer, Dr. S. R. McCracken of Excelsior Springs, and County Physician, Dr. W. H. Goodson of Liberty. The Board of Censors are Dr. I. C. Fowler of North Kansas City; Dr. E. B. Robichaux of Excelsior Springs, and Dr. W. H. Goodson of Liberty. The meetings are held on the last Tuesday of each month, at either Excelsior Springs, Liberty or North Kansas City.

The Clay County Medical Society is the sponsor of the Fall Clinical Conference that is held on the first Thursday in November of each year at the Elms Hotel in Excelsior Springs. Outstanding physicians are brought from all parts of the United States as guest speakers to participate in this meeting.

Through 100 years of continuous service to the people of Clay County, the Medical Society has progressed from a charter membership of nine to the organization as it is to-day. The physicians, past and present, have left a heritage, rich and challenging, to the future generations. May the next century bring about even greater progress than the one just ended.

Sarcoma Summary

. . . The microscopic pattern of soft tissue sarcomas gives a fair index of the clinical growth rate of the tumor. Certain types such as rhabdomyosarcoma and synovial sarcoma have a poor outlook.

. . . Highly undifferentiated sarcomas usually have a rapid clinical course, and prognosis is poor, no matter what treatment is given.

. . . Incisional biopsy of soft tissue tumors is essential to diagnose and classify the lesions accurately prior to the institution of specific therapy.

. . . Primary enucleation of a soft tissue tumor may result in contamination of the entire operative field by tumor.

. . . Primary surgery without biopsy may result in unnecessary sacrifice of vital structures.

. . . The decision of the extent of surgical therapy must depend on consideration of the histologic pattern of the tumor and its anatomic location.

. . . Consideration of primary amputation must be given to deeply seated sarcomas of the inner thigh and popliteal fossa.—Zelig Lieberman, M.D., and Lauren V. Ackerman, M.D., St. Louis, *Surgery.*

Special Articles

Our Heritage Is Our Responsibility

THOMAS H. ALPHIN, M.D., *Washington, D. C.*

For its 100th Anniversary Celebration the Clay County Medical Society has presented a most significant program. Leaders in medical thinking have told you of their work, their ideas, and their ideals. Tonight, somewhat anticlimactically, this minor laborer from the far corner of the vineyard finds he is to place the capstone on this fine structure your committee has builded.

Actually, the privilege of describing American medicine's heritage tonight falls on no one man. Each of us holds within himself a share of our medical heritage, and each of us holds within himself its meaning. In our heritage is the knowledge and power we have gained from our predecessors, the help and support we have from our colleagues, and the respect and honor in which we ourselves hold our profession. I shall not try to describe our heritage to you. You hold it, you are its guardians and its trustees—it is not scientific data, not miracle drugs, nor yet clinical training and knowledge. Our medical inheritance makes us the kind of physicians we are. We ourselves must live up to our heritage in the clinic, in the hospital and in our professional societies and organizations.

The great strength of the physician rests not in his degree, his training, his license to practice, nor his experience—his strength is the man that he is. What is the most important question to be asked concerning a professional colleague—is it his school, his hospital background, his associates or even his honors? It is none of these, the great question is "What kind of a man is he"? The other things are important, yes, some even necessary, but the test of the man is the man.

Are we physicians then with our great heritage—and it is a great heritage, make no mistake about that—are we physicians then a group of supermen, especially gifted and especially blessed? No, of course not! Perhaps the selection committee has looked hard at our college grades—but 20 per cent of admissions last year had only C averages; perhaps someone has spent a relatively large sum of money to pay for our medical education—but I am sure there are many in tonight's audience who in a large part financed their own medical studies, working, borrowing, and even begging to do it—and surely we have each of us wrestled deep into the night with anatomy, biochemistry, and all the -ologies. We have had a certain minimum of ability, we have had a strong desire and we have done a fair share of work to earn our position as physicians. But we are not men with a great heritage because we are fundamentally better than other men —we are men with a great heritage because our profession exacts from physicians every bit that they have.

Medicine is a demanding mistress and a stern wife.
He who tastes her charms serves her all his life.

Into our care is given the cry of the newborn, the smile of the child, the hope of young motherhood, the strength of maturity and the quiet peace of old age. These are our responsibilities, and they form and shape our heritage.

Since these are the things of which all our lives are made, these are the things held most dear by all men. And these responsibilities of the physician lie in our hands for all the world to see. Small wonder then that our fellowmen expect so much of us. And this has always been so. In Roman times Seneca said, "You buy from your physician something of inestimable value: Life and Health. The physician's heart beats faster because of me and not because of personal fame in his art. It was not enough that he prescribed and even brought the necessary remedies to me in person. He sat anxiously by my bedside and came at once . . . he did not refuse any service, and he listened to my sighs and complaints with true compassion."

The proportion of Senecas in the population has not increased, but we have many more people who put their thoughts of us into writing—and some are not so understanding, nor yet so complimentary. According to a recent A.M.A. survey, magazines with nationwide circulation have published eighty-five articles on the medical profession since 1949, seventeen of these between January and September of this year. So the wind abates not but blows ever stronger. Its velocity was 1.2 articles per month in the nearly five years prior to January first 1954 and over two a month in the eight months since then.

The family physician is still with honor even in his own county, but in what honor is the profession held in the country? I believe I can answer that question for you—the American physician is held with just as much honor in each citizen's mind as that citizen holds the physician who has cared for him. Each of you is custodian of the honor of the American physician in the eyes of each of your patients.

A book by an American social philosopher has created considerable recent comment. He presents an interesting thesis as to the forces that have shaped and are now shaping individual destiny. Dr. Reisman postulates three consecutive periods in history during which three distinct forces were brought to bear on the average man's life. The first or tradition-directed period reaching back beyond medieval times found the average man's destiny ruled by birth and custom. The sons of kings became kings and the sons of woodchoppers, woodchoppers. A second or inner-directed period began with the birth and growth of individual liberty and tradition was replaced by indoctrination with a moral code upon which a person could base his decisions and around which he should organize his life. The final period, said to have begun in the United States in the 1920's, might be called the outer-directed or radar period, currently described as the era of the public relations man. Today, Dr. Reis-

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Presented at 100th Anniv. Celebration of Clay County Med. Society, Excelsior Springs, Missouri, November 4, 1954. Other presentations will be published in forthcoming issues.

Assistant Director, Washington Office, American Medical Association.

man believes, we strive to shape ourselves in response to what we feel is our contemporaries opinion of our actions.

At the risk of being accused of atavism I should like to say that while the American physician must be always sensitive to his socio-economic environment, he must not stop depending upon those fundamental things which constitute what is called "character." I refer to that quality described by Emerson as "a reserved force which acts directly by presence and without means, a moral order seen through medium of an individual nature—the healthy souls standing united with the Just and the True."

If physicians require of themselves that they continue to be inner-directed by Justice and Truth we may hope to become men of Character. As such Emerson has warned we "shall become the conscience of the society to which we belong." That is a heavy burden and sure to make its bearer the target of much abuse. The still small voice that says "you mustn't," may be a constant companion, but he is not a jolly one. He's a nuisance and he's not a bit more popular when he says "you know it's your duty to—." (The latter variety often has a predominantly New England ancestry.)

Furthermore since Emerson made his observation there has been a change in the scope of the phrase "society to which they belong," beyond the limits of the foresight of a Nostradamus. The sage of Concord could eat his breakfast at home and his lunch at Boston. The airline that brought me here provides a schedule that would now allow him to have dinner in Paris, breakfast in New York, and arrive in plenty of time for an early family supper in Los Angeles. The society to which Emerson belonged was predominantly that found within fifty miles of his home. The society to which we belong has now extended its borders well beyond the continental United States. Our strategic air command potentially looks over the shoulder of every citizen in the world. Air wings of other nations practice course plotting that can hit Kansas City's new plastic Hereford literally on the nose.

Does this change in time and space invalidate Emerson's observation? What of our position as men of Character on the questions posed by national issues and specifically in dealing with the federal government?

If the profession speaks out for the good of the country and rejects special privilege for the few, we may be subjected to vituperative attack. If our position is sound, the attack will not be directed against the question itself or our stand on the question, but frequently against our motives. I believe careful consideration will show that such attacks, if honestly appraised by us, will only strengthen us. If the motives of a few are cited to us we can require that these examine their conscience for their own good and for the good of the order. If the attack results in a fair appraisal before the public of the issues we can ask no more. Jefferson long ago wisely observed that a democracy need not fear as long as the people are informed on the issues. Let him who will beat his drums, howl, scrape, chisel and chip—if we each keep well our share of our profession's honor and integrity, our opponent shall be as the sounding brass and the tinkling cymbal and he shall not prevail against us.

Now as to our dealings with government. How do the workers in the vineyards along the Potomac keep to the rules? There the grapes can grow very wild! American medicine's active interest in the federal government was born of two postulates and operates on two correlated precepts:

1. The medical profession has become thoroughly entangled with a vastly expanding federal government. Therefore the medical profession must keep immediately, completely and accurately informed on all governmental matters affecting the practice of medicine.

2. The profession has a duty to the people to be sure that proposals affecting the nation's health be carefully evaluated before adoption. It must promptly, fairly and honestly present the facts and sound conclusion based upon those facts to our legislators and administrators.

Let us examine this a little more fully. Is our profession heavily involved in the activities of the federal government? In the federal budget for this fiscal year we find that one sixth of the total medical bill for the nation, including everything from baby powder to autopsies, is paid with federal funds!—the over two billion dollars that Congress appropriated for medical costs represents one tenth of all federal non-defense expenditures. And I am sure no one of you doubts that you as individuals are personally close to the government. We have all reached into our pockets to find only the tax-collector's hand.

How about the need for immediate, quick and accurate information for the physicians at home? Congressmen will listen to information supplied by Washington representatives but they act on word from their own people. A rider on an appropriation bill would have had the V.A. selling medical care indiscriminately to veterans, with the patient paying as much of the bill as he felt he could afford. Members of the appropriation subcommittee presenting the rider did not appreciate its full impact and it was taken to the floor of the House to be defeated there after it was brought to the attention of the members by our profession. This whole fight took only ten days from start to finish.

In the 83rd Congress 407 bills of sufficient importance to the health of the nation to be followed by our office were introduced. Of these only twenty-four became law and nearly all of those were much changed in the process. When you remember that all bills introduced in both sessions total 16,470, you can understand that most congressmen welcome information if it comes from people they have learned they can trust. A most welcome visitor on Capitol Hill is the man who knows what he is talking about and knows it in a few short sentences.

The prompt, fair and honest presentation postulate takes us straight back to the question of Character. Medicine will need representation before government for all of the foreseeable future. Those who shun medicine's principles have grown to fear its power and are ever ready to view with alarm and point with horror. To be successful we must earn and jealously guard the confidence of congressmen and other governmental leaders. We should not indulge in petty partisan politics, we cannot sacrifice principle to expediency and we must never turn our backs on Truth and Justice. If we continue to hold to these principles we shall always be afforded the opportunity to present our case before the Congress. If our position is taken after careful collection and thoughtful examination of the facts with our only consideration the ultimate good of our patients (in other words, if we form our conclusions using the methods of good medical practice) then we can be almost sure that the majority of representatives in government will see the wisdom of our stand.

Should we then expect that eventually our profession's dealings with government will be simple, smooth and sweet? Perhaps such a time may arrive but I do not expect to see it. I am not sure I would ever want to see it. Certainly I would not want to see it come here as it has come in a country behind the Iron Curtain where we learn—and I quote, "there was no need to investigate the voting records of incumbents before the election—they had all consistently voted 'yes.'" We need to round off our political opinions against those of others, for that is the way of democracy.

Fisher Ames, who was an important conservative figure in this country during the formative days of the republic, compared the totalitarian state of his day (monarchy) with the republic in these words: "A monarchy is a merchantman who sails well, but will sometime strike on a rock and go to the bottom; whilst a republic is a raft which would never sink, but then your feet are always in water."

Let us look more closely at Fisher Ames' raft. The raft can be made of any of several types of material which are lighter than water. The best material of which a raft can be made contributes buoyancy because of many small compartments containing air, each capable of floating as a single unit, but each bound closely to its fellow. For stoutest construction each log is bound several times to the adjacent logs, not in a continuous wrapping but with many separate ties. Generally, the bigger the individual buoyant unit, the higher the raft floats in the water. The smaller the units and the heavier the ties, the stouter the raft but the lower in the water and the more often your feet will get wet. There is a lesson for the centralizers here. It is pleasant to float above the waves on big empty oildrums when the weather is calm; but the low lying log raft with each small unit bearing its individual share of responsibility, while damp even in a smooth sea, is more apt to survive a storm.

Let us not worry about our feet getting wet. The interest of the physicians of the United States in their duty as citizens has been and will be strengthened by repeated immersion into the sea of socio-economics and government. Let the responsibility for remaining afloat be kept in individual personal integrity rather than in the over-centralized pooling of responsibility. Let us keep strong the ties that bind us into a cohesive profession but let us not sacrifice our individuality. Finally, let us increase the strength and numbers of the ties that bind us as a unit to the other units which make up the raft that is our republic.

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Two Paths to Liberty

LEONARD E. READ, *Irving-on-Hudson, N. Y.*
President, Foundation for Economic Education, Inc.

"I WANT LESS talk and more action."

That sentiment typifies the initial reaction of many persons when they suddenly awaken to the increasing dangers which beset their liberty. They demand action. In trying to understand this meaning, it would first seem necessary to examine the possible types of action.

Are there others than physical action and intellectual action? How could one create an absence of restraint——liberty—by using physical action other than against those who already engage in immoral restraint? To adopt this tactic—to employ physical force in any form or degree, except in self-defense—would be merely to substitute a new form of compulsion for the existing forms of compulsion, trading violence for violence—revolution! At best, it is the court of last resort and is not, really, what most persons have in mind when they insist they "want action." Most of them mean only that they want "something done," and done quickly. They "want to fight peacefully." The thought never as much as enters their heads to use fists or guns. They reject physical action, in their intentions, by not even contemplating it. All that remains, then, is intellectual action.

A MANIA FOR ORGANIZING

How does one fight for liberty intellectually? The best thing to do even in an "intellectual fight" for liberty, think many, is to "organize." Usually they think in terms of "organizing" someone else to do something instead of organizing their own time and energies. This damaging tactic is indulged in as though "organizing" had the power, somehow, to absolve individuals from doing any more than joining some organization. The fact that organization without persons is an impossible abstraction is overlooked. This mania for "organizing" is usually little more than an effort, doubtless unwitting, to transfer responsibility from oneself to some other person or persons who are perhaps even less competent.

Responsibility and authority always go hand in hand. Thus, if this process of organizing succeeds, authority over one's own actions is lost precisely in the degree that responsibility is shifted to someone else. The citizen who "wants action," and resorts to this type of tactic, ends up further from his goal than ever. In fact, "organizing," more often than not, is merely an attempt to "pass the buck." Yet, oddly enough, the mere act seems to have the strange power of conferring a sense of accomplishment on the ones who "organize."

ORGANIZATION IS LITTLE UNDERSTOOD

Organization, though much used, seems to be little understood. In the field of extending individual liberty—the only role of organization here discussed—organization has strictly limited, technical possibilities. But, unless these limitations are scrupulously observed, organization will inflict on liberty more harm than good; thwart, not abet, the spread of understanding. Sobering is the thought that if there were no organization there could not possibly be any socialism!

In committee-type organizations, it is customary for persons to speak and act as a collective—as resolutioners in unison—instead of as persons. The best that these synthetic arrangements of individuals can produce is the lowest common denominator view of the majority. Such a view is almost certain to be different from, and inferior to, the best thought of the individuals who go to compose the arrangement. And, even the best is none too good when it comes to the difficult problem of how to understand liberty.

ORGANIZATION CAN BE USEFUL

Organizations can, however, serve a highly useful purpose in developing and spreading an understanding of liberty if organization be confined to its proper sphere. For the purpose of advancing liberty, which depends solely on the advancement of individual understanding, the only usefulness of organization would seem to be to accommodate and to make easier the joint contribution to, participation in, and ownership of the physical assets that will aid in the process. These physical assets may include typewriters, buildings, specialized libraries, printing presses, telephones and the many other helpful tools to individuals who are attempting to extend their understanding of liberty—physical accommodations enabling searchers for truth to exchange and disseminate ideas and knowledge more effectively. Primarily, these physical assets can be used to secure the advantages which derive from specialization and the division of labor. Organization, limited in this manner, is a useful and efficient means for achievement of these desirable ends. I sincerely hope that the Foundation for Economic Education is such an organization.

ORGANIZATION CAN BE HARMFUL

Organization, however, like government, if extended beyond its proper sphere, becomes positively harmful to the original purpose. This fact constitutes the need for much careful thought on organizational limitation. Just as government becomes dangerous when its coercive, restrictive and destructive powers are extended into the creative areas, so do voluntary organizations pervert and destroy the benefits of intellect when the capacity to merge is extended beyond the amalgamation of things—physical assets—to the point of causing individual judgments to conform to that of another person or persons. Truth, as each person sees it, is the best that the mind of man has to offer. Its distortion, inevitable when achieving a collective chorus, does injury to understanding.

If organization is not the best way to secure liberty, then what is? My answer—self-improvement—is the essence of simplicity. The reasons which lie behind the answer, however, are complex. But without the complex reasons, the simple answer is useless. The inclinations to escape personal responsibility, and the conjured up beliefs that somehow intellectual miracles can be wrought by us on someone else, are too persuasive for easy rejection. Unless we fully understand that these inclinations and beliefs are wholly without merit we will continue to indulge them. I wish to make the argument, as best I can, for self improvement as the only practical course that there is to a greater liberty.

Is there one book or one article written by anyone at any time that can be designated as the final word on liberty? I doubt it. Perhaps the best that can be said is that the finest minds of all time have been in pursuit of its understanding and that now and then a tiny ray of new light has been thrown on what theretofore was darkness and lack of understanding. These few most advanced searchers have been among those who say: "The more exploration I do, the more I find there is to learn."

The reason for this difficulty in understanding liberty is that liberty, like truth, is an object of infinite pursuit, a quest without end, ever. Liberty does not lend itself to objective definition except to say that liberty is the absence of its opposites—restraint or coercion.

The understanding of liberty requires intellectual ventures into the areas of the unknown or, more likely, into the areas that have become unknown. Have you not noticed the vigor we employ when a present liberty is threatened and then, when it is lost, how soon we refer to it as a "social gain"? How can one who has been thus trapped, or who himself has lapsed into thinking of a new restraint as a "social gain," possibly identify the liberties we have lost? He has lost his own knowledge and his own understanding to the same extent that he has altered his terms.

The individual who does not thoroughly understand, and is not able competently to explain, the fact of our interdependence and how it can be satisfied solely with voluntary effort, also cannot correctly say that he has mastered the subject of liberty. If this be right, then nearly every person I have ever talked with, read about, or heard of is a neophyte in his understanding of this subject.

In brief, not a single person among us is justified in regarding himself other than as a student of liberty.

SEARCH HERE

In searching for students of liberty, the search must be within ourselves. In the world of persons it is only within each of us that the unexplored areas exist. The best explorer of one's self is one's self. It is not possible to impart to others that which we do not possess. The most we can do is to make known a willingness to share what we have discovered by our own thinking, or what we find edifying from recorded thinking. Whether or not what we offer is, in fact, shared, is beyond our power, and we should realize this.

It is conceded that the student attitude, this search within ourselves, may at times appear unrewarding. But, if the understanding of liberty is to be advanced, the attempt must be persisted in, regardless of its seeming extravagance in time and effort. A statement ascribed to Christ is heartening if one will think of Him in the symbolic terms of ultimate truth and infinite goodness, and of our own weakness and inabilities as weeds and brambles, and of our own rare virtues and abilities as fertile ground:

> "Presently the Master appeared on the steps of the Synagogue and began to speak. It was immediately obvious that he had been aware of the rudeness of the crowd—and deplored it. He had been appointed, he said, to offer a way of salvation to the world; and that meant everybody. In a task so great as this, no prudent thought could be taken about the cost of it or the waste of it. His mission, he said, was to sow the seed of good will among men in the hope of an eventual harvest of peace. Much of this seed would be squandered. Some of it would fall among weeds and brambles where it would have no chance at all to grow, but the sower could not pause or look back to lament this extravagance. Some of the seed would fall upon stony ground where there was very little soil to nourish it and the tender plants would soon wither and die; but the sower must not be dismayed. Some of the life-giving grain would grow! Some of it would find friendly lodging in fertile ground!"

Action? Intuition seems to commend that I try to tell others what to do and how to think. Reason supplies a contrary answer. It suggests that pursuit of my own personal understanding is the only practical action for me to take. Neither personal nor institutionalized evils exist among men who comprehend them to be evils. If I advance in my understanding of the true and the false, the understanding that I acquire will be sought. Reason recommends that I get the horse before the cart; that first I must learn; that influencing others will take care of itself. Reason says that influence in the creative areas can have no being prior to learning; that learning has no end.

Some agree with this line of reasoning and the conclusions herein set forth. They will assert them to be self-evident, but will argue that this suggested student approach—this process of self-improvement—is too slow to meet the challenge of these times. I am in no position to deny this. But, in my opinion, there can be no short cut. The only way to the infinite, to ultimate truth—that is, to understanding—is through one's own person. When we gain an appreciation of this principle, we will be on our way to as little violence and to as much liberty as can be in store for us.

BOOK REVIEW

GERIATRIC NURSING, by *Kathleen Newton,* R.N., M.A., Second Edition. (St. Louis, C. V. Mosby Company, 1954. $4.75).

This small book has accomplished its author's aim in pointing up the importance of nursing and related care for the aged, a problem which is causing increasing concern for all thoughtful persons. While essentially a handbook for the nursing profession, it is nontechnical enough to be read by laymen faced with the problem and readable enough to be interesting and profitable for the physician.

Miss Newton quite properly and in a very satisfactory manner has discussed the emotional needs of older people in about one-third of her book, without lapsing into the jargon of either psychiatry or sociology. The thinking is oriented somewhat toward the situations of urban life rather than toward those of a predominantly rural state such as Iowa. —*J. E. McFarland,* M.D.

On Trends in Medical Literature

W. R. BETT, *London, England*

HUMAN NATURE does not change. There always have been, and there always will be, what the Earl of Chesterfield called "idle or necessitous authors." The advice which he gave his natural son more than two hundred years ago continues to have a modern ring: "Throw away none of your time upon those trivial futile books, published by idle or necessitous authors, for the amusement of idle and ignorant readers: such sort of books swarm and buzz about one every day; flap them away, they have no sting." In the world of medicine today, inundated with periodicals, good, bad or indifferent, on every conceivable specialty, writing is no longer a thing of beauty which should be a joy forever—it is a malignant growth.

Why do doctors write? The motives of some are noble, those of others are not. There is, first of all, the anxiety to share with one's colleagues worthwhile information. Such a desire is sacred and should not be profaned, for dissemination of knowledge is essential to the progress of medicine. How frequently, however, does not the urge to show off the writer's knowledge exceed his eagerness to improve that of the reader!

Then there is the itch to write in order to advertise one's intellectual or technical accomplishments, to build up a large and lucrative practice, or merely to justify one's academic standing in the eyes of colleagues and of the powers that be. Unfortunately, many physicians, proud of belonging to a profession that is—or should be—both learned and literary, are animated by the prejudice that professional success can be measured only with the footrule of literary output. The universality of this belief scarcely lessens its pathos. While it is generally accepted that the only ethical or genteel way in which a doctor can advertise himself and his wares is by writing scientific papers in the medical journals or medical articles of popular interest in the lay press, the risks of such a practice are not always realized. Wilfred Trotter's warning is pertinent: "When the poison of publicity once gets into a doctor's veins, there is no cure, medical or surgical."

Another undesirable motive for rushing into print is a desire to establish priority. Hence the many "preliminary communications" in the literature. If only their authors were honest or big hearted enough to follow these up with a note admitting that their original bright ideas had misfired!

THE PYTHAGOREAN SILENCE

The sum total of medical knowledge is built up of the contributions of individual workers, so that it becomes the doctor's duty to record and to interpret worthwhile findings. Sir William Osler always urged his students to report their discoveries in short and concise notes, but he was careful to add this warning: "Beware of words—they are dangerous things. They change colour like a chameleon, and they return like a boomerang." That he was well aware of the dangers inherent in indiscriminate writing is clearly seen in this quotation taken from his address "Internal medicine as a vocation":

"While the Pythagorean silence of nearly seven years, which the great Louis followed (and broke to burst into full-blown reputation) cannot be enjoined, the young physician should be careful what and how he writes. Let him take heed to his education, and his reputation will take care of itself, and in a development under the guidance of seniors he will find plenty of material for papers before medical societies and for publication in scientific journals."

MEDICAL JOURNALS AND LITERARY OUTPUT

Before journals appeared on the medical horizon, physicians were offered little encouragement and few opportunities to record their case histories, observations and discoveries. Authors had to publish their communications as pamphlets printed at their own expense.

American medical journalism was born on July 26, 1797, its first child being the *Medical Repository* (1797-1824), edited by Samuel L. Mitchill, Edward Miller and E. H. Smith, of New York City. During the eighteenth century this quarterly was the only medical periodical in the United States. As late as 1803 John Conrad Otto sent his classic communication "An account of an haemorrhagic disposition existing in certain families"—the first description of hemophilia—to this journal, as he had no other choice. In the following year John Redman Cox started the *Philadelphia Medical Museum* (1804-9). Other journals then began to appear. They were mostly what Garrison calls "Eintagsfliegen" —here today and gone tomorrow. A notable exception was the *Philadelphia Journal of the Medical and Physical Sciences,* edited by Nathaniel Chapman. Born in November 1820, it remains perpetually young as the *American Journal of the Medical Sciences.* Truly has it been said that the history of modern medicine cannot be written without reference to its files. The *American Medical Recorder* (1818-29) was fortunate in receiving for publication William Beaumont's manuscript which was to usher in a new era in the history of physiology. "Thus may a journal achieve a deathless reputation from an unsolicited manuscript." (Victor Robinson.)

Since 1800 medical periodicals have served as the principal medium for doctors to communicate observations and ideas, and they have in no small measure been responsible for the advancement of medical science and of medical education. Their growing multiplicity has been the most important reason for the increasing volume of literary output. In the days of few journals—the Golden Age when Atlantis stood above the sea—the author had to woo the editor. Today editors are only too often compelled to tout for contributions.

With the passing of time the type of article published has changed significantly. In the first volume of the *Johns Hopkins Hospital Bulletin* (1890), for example, original material made up 30 per cent, and

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M.R.C.S., L.R.C.P., F.R.S.L., F.S.S., Research Librarian, National Association for the Prevention of Tuberculosis, London; Bibliographer, British Association of Dermatology; Hon. Member, American Medical Writers' Association.

in 1949 60 per cent. For the *Journal of the American Association* the corresponding figures are 30 per cent in 1900, and 65 per cent in 1949.

The diseases which usurped most space in the salad days of American medical journalism were malaria, yellow fever and disorders of the chest. Diseases of the heart received little attention.

Case reporting has always constituted one of the main types of medical articles, and it may be described as the foundation of medical literature. Though frowned upon by the statistician, single case histories are often useful as furnishing descriptions, if not of new diseases (it is too late to be ambitious), at least of variations in established patterns. Their recording may be the only form of medical writing available to many doctors.

Among other factors determining literary output and trends in writing may be mentioned the influence of war and the introduction of new drugs, which at first always work wonders—in the literature. This article may conclude with a reference to the relation between the quantity and quality of literature and the pharmaceutical industry. Research sponsored by many of the larger ethical pharmaceutical houses has often been of a highly distinguished kind, and the discoveries made in their laboratories have included some of the greatest in medical history. The carrying-out of experimental and clinical trials naturally results in the publication of articles of a tentative or preliminary nature, and these, in turn, inspire other prospective authors. A personal experience may here be recorded. Stimulated some time ago by the professional mailings, beginning in April 1947 and stressing the dangers of overweight, of a well known London house of manufacturing chemists, I was interested to survey the English medical literature, comparing the two periods 1935-39 and 1947-52. For this purpose the *Quarterly Cumulative Index Medicus* was used with special reference to the headings:

"obesity, complications and sequels"
"blood-pressure, high-etiology and pathogenesis"
"cardiovascular diseases—etiology and pathogenesis"
"diabetes mellitus—etiology and pathogenesis."

For the periods January-June 1949, July-December 1951, and January-December 1952 direct reference had to be made to twelve of the leading British medical periodicals.

No scientific conclusions can, of course, be drawn from so amateurish a survey, but at least it was instructive to note that, though the number of pertinent articles published in the two periods was approximately the same, the majority in the first period were original articles, while those in the second included in addition editorial annotations, leading articles and correspondence. I was also struck by the guarded tone of the publications in the first period, reflected in such phases as "it is suggested," "no *definite* correlation," "may be a factor," "there is evidence." A much more dogmatic tone crept into the second period, as witness such expressions as "undoubtedly," "statistically associated," "an opinion which is now accepted by many," "control of obesity . . . essential."

Thus it is possible that the efforts of manufacturing chemists might have to be reckoned with as playing a part in directing medical thought and thus influencing the trends in medical literature.

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Thirty

When this copy reaches our readers, the climax of the Christmas spirit will be approaching rapidly, just around the corner. The drums of commercialism will be increasing their tempo and volume, and for the millions who really respect and remember the true meaning of Christmas there will come a period of prayer, of joy and of thankfulness.

We must remember, however, there are many millions in the world today who cannot or will not be able to express themselves in this season of "Peace on Earth, Good Will Toward Men." They will be the unfortunate ones who are dominated by masters who believe religion and Christianity are but "opiates for the masses" and that crass materialism is the only true god. Sometimes we wonder just a wee bit about our own people, do they not substitute "the great swap" for the poignant beauty of the Birthday of Christ?

Since this is the mellow season, and since this will be our last contribution in this space, it seems most fitting that we thank each and every one who has contributed his moiety during these last twenty-four issues. To our regular contributors, who have been faithful and on time with their contributions, to our special contributors, to our guest editorialists, to our feature article writers, to our many esteemed friends who have written and orally made constructive criticisms and suggestions—to all of these, our heartfelt thanks. To our advertisers, who contribute the life-blood, the dollars, which made our Journal possible, goes a vote of gratitude. To those in the Executive Office who have done so much to help, we express our appreciation.

May God bless you, all of you; a Merry Christmas and a Happy New Year!

Vincent T. Williams, M.D.

NUTS!

There are two classes of citizens—those who absolutely cannot afford to carry hospital and health insurance and those who can afford to do so. The first group (those not able to afford insurance) has always been with us. The individuals comprising it have always been cared for and do not constitute a new problem. Until recently they have been direct wards of the medical profession. More recently the government has become partly responsible for them. If the government wishes to insure them against sickness and hospitalization—well and good as long as the insurance stops there.

Most of the second group (those who can afford insurance) do carry health and hospital insurance; if, however, they are very well to do and do not carry such insurance they are not bothered by hospital and medical bills, although they are foolish not to have insurance. A great many carry their insurance by budgeting, and this is not difficult since the cost of a package of cigarettes a day over a year will insure a whole family against sickness and hospitalization for a year. We have observed that our indigents as a rule consume much more than one package of cigarettes to a family. And then they come in for indigent hospitalization and medical care!

There is a fringe of our people who are either too improvident, shiftless or cussed not to budget for health and hospitalization insurance, although they could do so just by cutting down on smoking or movies. When they are confronted with sickness they have nothing to help them and they are embarrassed to be on an indigent basis. It is for this small group that many of the proponents of state medicine or socialized insurance are so anxious to foist state medicine on everybody. Just to avoid embarrassing this small group who have been remiss about budgeting, which they could have done, the "do gooders" want to provide socialized medicine for everybody. And we know that socialized medicine is far inferior to what we now have. Even the small group (who fail to but could budget) whose face the "do gooders" are trying to save would receive medical care inferior to what they now get or would get if they needed it.

Moreover, we know that socialized medicine is extremely costly. In Great Britain the cost has so exceeded the dues that the general revenue of the government has to be severely tapped. This they could not do were it not for the huge subsidy that we give the British. If we embark upon a plan of such foolishness and deficits—who in tarnation is going to subsidize us?

F. T. H'DOUBLER, M.D.

A Tribute to the Cancer "Jet Army"

No greater or more difficult problem confronts civilization than the solution of the inner secrets of cancerology. The secrets of atomic energy have already proved to be less difficult to solve. If all the leading cancerologists of the world were to meet as a commission to uncover the mysteries of cancer, their conclusions would probably not be too enlightening. However, such a commission for study might be worth a trial.

Progress in the fight against the Number Two Killer is being made today by men of science. The field of radiology with x-ray and radium offer valuable contributions both in diagnosis and in therapy. Early diagnosis with surgical intervention offers the greatest hope. Hormones are of great therapeutic value in certain cases. The armor plate of cancer has been dented but nowhere has the shell been pierced.

Progress in the future lies in the two fields of education and research. Education must be twofold: education of the public in matters relative to earlier detection of cancer, and education of scientists in all phases of science and medicine for future study of cancerology and its problems. Research can only be carried on by men with an educational background in their respective fields.

This is where the American Cancer Society enters the picture. Yearly it grants millions of dollars to fields in education and research. This is where the hopes of future cancer victims lie. These vast sums are contributed by the public only through the diligent hard work of the field workers and crusaders of the American Cancer Society. In the state of Missouri alone these workers collected a total of $447,573 in 1954. Composed of housewives, secretaries, workers in all branches of industry, church groups, lodge groups, they are the "jets" of future cancer progress. Where except here in our own country could such an army be raised?

To these men and women of America, we, the members of the medical profession, tender a salute of gratitude and an humble "thanks" for their generous help in searching for the solution of the greatest problem confronting mankind today.

MARTYN SCHATTYN, M.D.

Are You a Shot Doctor?

The phallic significance of hypodermic needles cannot be denied, or so I am assured by my psychiatric confreres. Can this explain their promiscuous use by so many otherwise worthy physicians? Does it account for the preponderance of women among the faithful recipients of "shots"? Interesting as this line of thought is, the problem of excessive needle medication is much broader and deeper and involves questions of motivation, judgment and ethics. There is no controversy regarding medications that clearly require parenteral administration; no reputable physician would deny the importance of this mode of administration of insulin. Emergencies often clearly require the route which is most rapidly effective, and the state of the patient's gastrointestinal tract may make oral medication either troublesome or useless. Clear contraindications are also recognized by reputable physicians. It is the borderline case, the one that does not present clear contraindications, nor yet positive indications, that leads to abuses of this technic.

The otherwise rigidly ethical physician will often find himself wrestling with the decision, to shoot or not to shoot. Temptation rears her beautiful head wearing many disguises as efficiency, speed, effectiveness, but a close look into the depths of her lovely eyes will reveal a small, tempting dollar sign. Some of the less savory detail men and their medical brethren of the same caliber frankly admit that the chief indication of needle medication is profit. These personages are well recognized by the medical profession. They are not the ones that trouble me; it is rather the upright and ethical practitioner who does not perceive the temptress for what she is.

The unwarranted use of parenteral medication favors haphazard diagnosis and follow-up care; it leads to prolonged and unnecessary therapy unless kept rigorously supervised. There is considerable evidence that many iatrogenic illnesses are induced by the unnecessary use of "shots." It would be well if each of us resolved to scrutinize closely and analyze carefully our indications for parenteral medications.

JESSE D. RISING, M.D.

Fraternally Yours

"De Goblins 'll Getcha If Ya Don' Watch Out!"

There is no gainsaying the importance of research in medicine. It is axiomatic that all advances in this field have been made by individuals, or groups, who have combined observation, experimentation, cerebration, good luck and research. It is furthermore patent that our profession discovers, rediscovers, finds out and forgets, learns and unlearns, great groups of things having to do with medicine. And parenthetically, the manner and means, the ballyhoo, with which such findings are announced to the public makes a big difference.

We recall the true story of a researcher who hooked up the increased incidence of breast cancer with a chart showing the increased use of pasteurized milk. This was all lovely until some snide character superimposed a chart showing the increased sales of Chevrolets! Now, perhaps the use of pasteurized milk, or the trauma to the female breast from the increased use of Chevvies, may have something to do with cancer of the breast . . . we don't know. But, to take these charts and look them over would convince anybody there must be some relationship!

As a student we remember one of the surgical researchers who was "het" up about bowel cancer and had Greek names for cancer "turn-off" and "turn-on" substances. Most especially we recall mineral oil was bad because it was a "turner-oner." And yet, we haven't heard much recently about mineral oil as an etiologic factor in bowel cancer. Perhaps twenty-five or fifty years from now this neglected discovery will be rediscovered and hailed as something red-hot. Along the same line, the boys at one Aggie College were all in a dither about ordinary butter causing cancer in experimental animals, which to some might be good sales talk for using oleo!

Now, let's talk about lung cancer and cigarettes, since it is the latest *cause celebre* in the long list of etiologic associations. We think those who have worked hard on this topic are to be honored and congratulated for their patient, painstaking experimentation. So far, their thesis and theory seem tenable and appear to be supported by available data showing that excessive cigarette smoking increases the incidence of lung cancer. Furthermore, their cigarette-tar experiments on animals seem to link up with the above inference. Maybe they're right!

One of the proponents of this theory, Dr. Ernest Wynder, of the Sloan-Kettering Institute, gives these reasons for his belief: Cancer of the lung rarely is found in nonsmokers; there is a direct relationship between the amount smoked and the incidence of cancer; there is a definite increase in the lung cancer death rate in countries where there is a marked increase in tobacco consumption; the increase in lung cancer is greater among men than women, and men more frequently are heavy smokers; there is a slight increase in lung cancer among women that parallels an increase in smoking by women; the incidence of the disease is greater in cities than in the country, corresponding to greater cigarette consumption in cities; most lung cancers are of a type usually caused by irritants; similar cancers have been produced on the skin of animals by application of the condensate from cigarette smoke; nonsmokers who get lung cancer are exposed to other irritants; lung cancer among nonsmokers not exposed to other irritants generally is not the epidermoid type that smokers get.

Some of the cancer boys at São Paulo, Brazil, this year must have gotten quite a jolt out of the Russki, Professor Alexander Savittski, who reported that in the Soviet Union, "sixty-five per cent of malignant tumors have been cured," and they have obtained "total elimination" of breast and uterine cancer in certain areas, because of preventive examinations of the entire populace; 'swonderful!

And yet, we know a good many physicians who agree with columnist Bob Ruark, who says, "I burn up about three packs of butts a day. I have been averaging this amount for twenty years. I have catarrh. I have a post-nasal drip. I do not have a cough, but I wouldn't care if I did. I will continue to smoke cigarettes until heart, cancer, or an airplane into a mountain forces me to stop."

Some of These Days

As this is written, there is increasing evidence that over the years some workable arrangement will be consummated between osteopaths and medical doctors. Regardless of "official" policies or opinions, the past antagonisms and feuds between these two groups are hard for the public to understand, and do not enhance the average man's opinion of either group. We believe many in the medical profession are firmly convinced there should be some way of working out any differences, and a mechanism evolved whereby older prejudices may be resolved.

It is heartening to see such steps taken in the state of Missouri. Undoubtedly, there will be some of our colleagues to whom such activities will come as a bitter pill; they will resent and resist all efforts to make effective a sensible or rational *rapproche-*

(Continued on page 1034)

Missouri Medical Meetings

Missouri State Medical Association, Kansas City, March 27-30, 1955.

St. Louis Pediatric Society—second Thursday of each month, September through May at Medart's Restaurant, 8:00 p.m.

Component Society Meeting Dates

Audrain County Medical Society—third Monday of each month.

Barton-Dade County Medical Society—third Wednesday of each month.

Benton County Medical Society—meets only on call.

Boone County Medical Society—first Tuesday of each month.

Buchanan County Medical Society—first Wednesday of each month.

Butler-Ripley-Wayne County Medical Society—first Wednesday of each month.

Callaway County Medical Society—third Thursday of each month.

Cape Girardeau County Medical Society—first Monday of each month.

Chariton-Macon-Monroe-Randolph County Medical Society—second Thursday of each month September through May.

Clay County Medical Society—last Tuesday of each month.

Clinton County Medical Society—meets only on call.

Cole County Medical Society—first Monday of each month.

Cooper County Medical Society—first Monday after the 15th of each month.

Dallas-Hickory-Polk County Medical Society—first Wednesday of each month.

Dunklin County Medical Society—first Tuesday of each month.

Franklin-Gasconade-Warren County Medical Society—last Tuesday of each month at the St. Francis Hospital, Washington, at 12:30 p.m.

Grand River Medical Society (Caldwell-Carroll-Livingston, Grundy-Daviess, Harrison, Linn, Mercer, DeKalb)—second Thursday of each month.

Greene County Medical Society—fourth Friday of each month.

Henry County Medical Society—meets only on call.

Holt County Medical Society—meets only on call.

Howard County Medical Society—meets only on call.

Jackson County Medical Society—fourth Tuesday of each month except June, July and August, at auditorium of General Hospital No. 1.

Jasper County Medical Society—second Tuesday of each month, September through May.

Jefferson County Medical Society—meets only on call.

Johnson County Medical Society—meets only on call.

Laclede County Medical Society—second Monday of each month at 6:00 p.m., at the Louise Wallace Hospital, Lebanon.

Lafayette-Ray County Medical Society—second Tuesday of each month at 7:30 p.m., at the Victory Cafe, Lexington.

Lewis-Clark-Scotland County Medical Society—meets only on call.

Lincoln-St. Charles County Medical Society—third Thursday of each month.

Marion-Ralls-Shelby County Medical Society—fourth Tuesday of each month, 7:30 p.m.

Miller County Medical Society—meets only on call.

Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve)—fourth Thursday of each month.

Moniteau County Medical Society—second Thursday of each month.

Newton County Medical Society—meets only on call.

Nodaway-Atchison-Gentry-Worth County Medical Society—first Monday in February, April, October and December.

North Central Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)—meets only on call.

Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney)—second Tuesday of each month September through June.

Pemiscot County Medical Society—third Thursday of each month.

Perry County Medical Society—second Thursday of each month.

Pettis County Medical Society—third Monday each month September through May.

Phelps-Crawford-Dent-Pulaski-Maries County Medical Society—fourth Thursday of each month.

Pike County Medical Society—third Tuesday of each month.

Platte County Medical Society—meets only on call.

St. Louis County Medical Society—second and fourth Wednesday of each month.

St. Louis Medical Society—first, third and fifth Tuesday of each month October through May.

Semo County Medical Society (Stoddard, New Madrid, Mississippi, Scott)—third Wednesday of each month September through May.

South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)—fourth Wednesday of each month.

Vernon-Cedar County Medical Society—meets only on call.

Webster County Medical Society—meets only on call.

West Central Missouri Society—second Thursday of each month.

Musings of the Field Secretary

Some one hundred people from all areas of the state attended the annual fall meeting of the Missouri Health Council at the Memorial Student Union Building of the University of Missouri, Columbia, on October 11. The program was sponsored jointly by the Health Council and the University Department of Rural Sociology and Adult Education and Extension Service.

"Organization and Problems of Community Health Councils" furnished the basis for the day's program. The featured address of the meeting was given by Richard W. Poston, Director, Department of Community Development, Southern Illinois University, Carbondale, Ill. Mr. Poston discussed "Community Organization for Better Health." He illustrated from personal experience instances where communities had, through voluntary cooperation and organization, effectively solved pressing health problems and built a desire for progressive Community health improvement.

Following the formal program a short business session of the Council was held where officers for the new year were elected as follows: Chairman, Mrs. Irene McCabe, St. Louis, executive secretary, Missouri Hospital Association; Chairman-elect, Mr. William Green, Columbia, executive secretary, Missouri Heart Association; secretary-treasurer, Mr. Chester Starr, Jefferson City, Director, Rural Health Service, Missouri Farm Bureau Federation. Additional members of the executive committee are: L. M. Garner, M.D., Jefferson City, State Nutrition Council; V. H. Casner, D.O., Kirksville, Missouri Association of Osteopathic Physicians; Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association. Among the guests present was F. S. Crockett, M.D., Lafayette, Indiana, Chairman, Council on Rural Health of the American Medical Association. Dr. Crockett also attended the organizational meeting of the Missouri Health Council in 1948.

The major project under the Council's sponsorship at present is the state wide Medical and Hospital Indigency Survey.

H. E. Petersen, M.D., President, Missouri State Medical Association, was the luncheon speaker, October 10, at the fall meeting of the Missouri State Medical Secretaries and Assistants Association held at the Missouri Hotel, Jefferson City. Dr. Petersen in speaking to more than 100 members in attendance explained the organizational set-up of the A.M.A. and the services it renders to the public and the profession.

He pointed out why the A.M.A. has taken positions for or against various national proposals relating to

(Continued on page 1034)

Members in the News

The budget request for operation of Missouri University's four year medical school for the 1955-57 biennium was $4,750,760.

President-elect of the Central Association of Obstetricians and Gynecologists is **Harold L. Gainey**, M.D., Kansas City.

At the Children's Convalescent Center, Kansas City, an open house and dedication of the new Dr. Irene C. Keeling Memorial Clinic for Cardiac Research was held. Dr. Keeling was medical director of the center prior to her death in September 1953.

Washington University Professor of Psychiatry, **George Saslow**, M.D., spoke to members of the Kansas City Menorah Hospital Auxiliary at their regular luncheon meeting.

Lawrence Epple, M.D., Mexico, has been ordered to active duty in the Navy. His wife, **Kathryn Epple**, M.D., will remain in Mexico and continue her practice of pediatrics.

At Grandview, **William A. Kells**, M.D., has associated with **Sam D. Hoeper**, M.D.

Maysville's only active physician, **James H. Sweiger**, M.D., has enlisted in the Army, leaving that city without a doctor.

The Southwest Missouri Chapter of the American College of Surgeons elected **F. T. H'Doubler, Sr.**, M.D., president, and **Durward G. Hall**, M.D., vice-president. Both men are from Springfield.

John L. Mothershead, M.D., has moved to St. Joseph and begun practice. He has recently completed a second tour of Army duty from 1950-1954.

Effective November 15, Harry M. Piper was appointed administrator of St. Luke's Episcopal-Presbyterian Hospital, St. Louis.

Dedication ceremonies for the new Barnard Free Skin and Cancer Hospital, St. Louis, were held in the fall. **Evarts A. Graham,** M.D., emeritus Bixby Professor of Surgery at Washington University, was the main speaker.

At Windsor, a community reception was held in honor of **R. J. Jennings**, M.D. Dr. Jennings has completed fifty years in the practice of medicine, and was described as ". . . beloved and respected by all in this community."

Richard B. Fulks, M.D., California, has moved into his new office building in that city.

William J. Shaw, M.D., Fayette, has resumed his duties on a limited basis. Dr. Shaw is making satisfactory progress following a heart attack in August.

It was announced that contributions to the Southeast Missouri Hospital had exceeded the minimum goal of $350,000 by over $100,000. Boosting the total significantly was a contribution of $50,000 by Cape Girardeau citizen R. B. Potashnick.

The first new general hospital in St. Louis County in thirty years, St. Joseph Hospital, Kirkwood, was opened in mid-fall. The new hospital of 150 beds was previously the Marine Hospital. Extensive remodeling and modernization of the plant has taken nearly a year and represents an expenditure of over a million dollars by the Sisters of St. Joseph, who were selected to equip and operate it.

In St. Louis, **Sol Sherry**, M.D., has been appointed director of Jewish Hospital Division of Medical Services.

Rehearsals of the St. Louis Physicians Orchestra are being held at the St. Louis Institute of Music every Monday evening.

The Kansas City Dietetics Association heard **Charles F. Grabske**, M.D., speak on "The History of Cardiology."

The Eli Lilly Tour for St. Louis physicians and their wives is scheduled for December first to third.

Kansas City physician **Ira C. Layton**, M.D., spoke to the Men's Group of St. Paul's Episcopal Church on "You and Your Heart."

The annual pilgrimage to the grave of Dr. Williams Beaumont, sponsored by the St. Louis Medical Society, was held November 21. St. Louis Circuit Court Judge Robert L. Aronson delivered a short address and **R. O. Muether**, M.D., placed a floral wreath on the grave.

Included among the newly nominated directors of the Chamber of Commerce of Kansas City is **Lawrence P. Engel**, M.D.

Good Health to All
at
Christmas Time
WEIR

And all through the year ahead
may you find happiness . . . success . . .
and peace of mind.

BLUE CROSS
BLUE SHIELD

Non-profit hospital-medical-surgical plans
sponsored by doctors

Saint Louis Kansas City

W. Wallace Greene, M.D., Kansas City, was among those honored at an Achievement Day Dinner given by the Trustees and Faculty of William Jewell College.

Kansas City physicians **Ralph E. Duncan**, M.D., and **Carroll P. Hungate**, M.D., attended the Fifth County Medical Societies Civil Defense Conference in Chicago.

The next state board examination by the Board of Medical Examiners will be held in Jefferson City on February 17 and 18, 1955. The Board will meet on December 11 to consider reciprocity applications.

The Missouri Division of the American Cancer Society re-elected **George A. Carroll**, M.D., St. Louis, as president.

J. W. Thompson, M.D., St. Louis, was a speaker at a regional workshop of the Catholic Hospital Association held in St. Louis recently.

IN MEMORIAM

Pope, Nathan K., M.D., Fulton, a graduate of Chicago College of Medicine, 1914; member of the Callaway County Medical Society; aged 66; died September 26.

Flader, Otto F., M.D., St. Louis, a graduate of the St. Louis College of Physicians and Surgeons, 1904; honor member of the St. Louis Medical Society; aged 74; died October 5.

Newton, Henry O., M.D., LaPlata, a graduate of Rush Medical College, 1896; honor member of the Chariton-Macon-Monroe-Randolph County Medical Society; aged 87; died October 11.

Arbuckle, Millard F., M.D., St. Louis, a graduate of Washington University School of Medicine, 1909; member of the Jefferson County Medical Society; aged 71; died October 23.

Obrock, Louis C., M.D., St. Louis, a graduate of the National University of Arts and Sciences, 1901; honor member of the St. Louis County Medical Society; aged 80; died October 28.

Beckham, G. S., M.D., St. Louis, a graduate of Barnes Medical College, 1905; honor member of the St. Louis Medical Society; aged 79; died October 28.

NEW MEMBERS

Crozier, Franklin A., M.D., Richmond
Weeks, George R., M.D., Nevada
Page, Jesse W., M.D., Poplar Bluff

PLAQUE PRESENTED DR. KELLING

"Thank you" was said to George A. Kelling, M.D., Waverly, by the citizens of his community when on September 17, they grouped in front of the Waverly Clinic. Speeches were made, the high school band played and many baskets of flowers and telegrams were received. In behalf of the Waverly community, Col. L. B. Wycoff of Wentworth Military Academy presented a bronze plaque to Dr. Kelling. The plaque reads: "Presented to George A. Kelling, M.D., by the citizens of Waverly as a token of appreciation for his forty-seven years of tireless endeavor in the practice of his profession, and for his never-ending interest in the promotion of community development. September 18, 1954, A.D."

PRESENTED TO
GEORGE A. KELLING, M.D.
BY THE CITIZENS OF WAVERLY AS A
TOKEN OF APPRECIATION FOR HIS
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ENDEAVOR IN THE PRACTICE OF HIS
PROFESSION, AND FOR HIS NEVER-ENDING
INTEREST IN THE PROMOTION OF
COMMUNITY DEVELOPMENT.
SEPTEMBER 18, 1954 A. D.

EXAMINATIONS FOR MEDICAL OFFICERS, U.S.P.H.S.

A competitive examination for appointment of Medical Officers to the Regular Corps of the United States Public Health Service will be held in various places throughout the country on February 15, 16, 17, 1955.

Appointments provide opportunities for career service in clinical medicine, research and public health. They will be made in the ranks of Assistant and Senior Assistant, equivalent to Navy ranks of Lieutenant (j.g.) and Lieutenant, respectively.

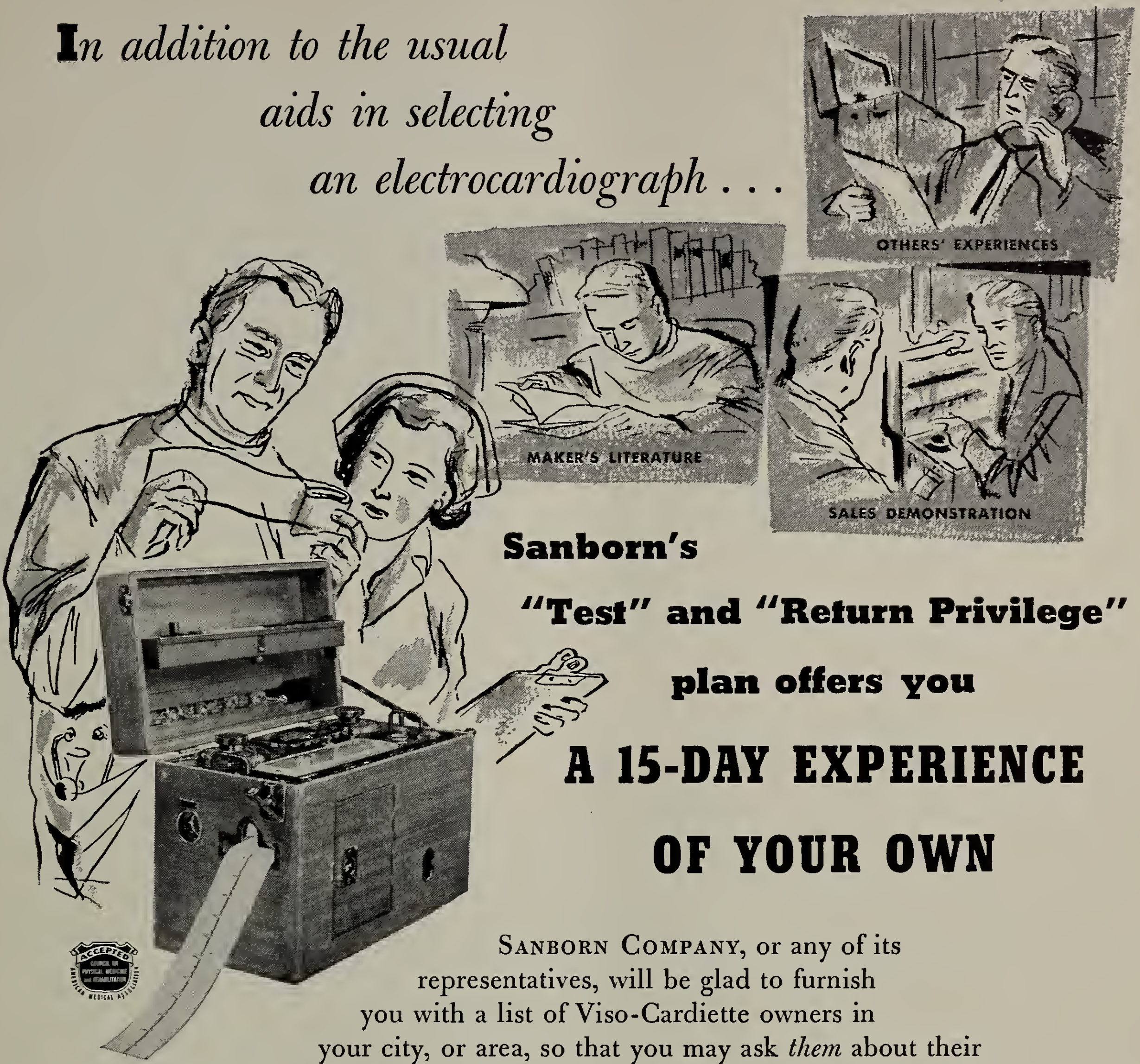
Entrance pay for an Assistant Surgeon with dependents is $6,017 per annum; for Senior Assistant Surgeon with dependents, $6,918. Provisions are made for promotions at regular intervals.

Benefits include periodic pay increases, thirty days annual leave, sick leave, medical care, disability retirement pay, retirement pay which is three fourths of annual basic pay at time of retirement, and other privileges.

Active duty as a Public Health Service officer fulfills the obligation of Selective Service.

Requirements for both ranks are U. S. citizenship, age of at least 21 years, and graduation from a recognized school of medicine. For the rank of Assistant Surgeon, at least seven years of collegiate and professional training and appropriate experience are needed,

*In addition to the usual
aids in selecting
an electrocardiograph . . .*



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However, exclusive *with* Sanborn is a "direct-to-user" policy which offers any physician or hospital added benefits in Ecg ownership. Among these is the opportunity to use a Viso Cardiette *as your own,* for 15 days, and without obligation of any kind. (If, at the end of the test period, you don't like the Viso, you simply return it to us in its convenient, specially designed shipping carton.)

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and, for Senior Assistant Surgeon, at least ten years of collegiate and professional training and appropriate experience are needed.

Entrance examinations will include an oral interview, physical examination, and comprehensive objective examinations in the professional field.

Application forms may be obtained by writing to the Chief, Division of Personnel, Public Health Service, Department of Health, Education, and Welfare, Washington 25, D. C. Completed application forms must be received in the Division of Personnel no later than January 12, 1955.

News From the Medical Schools

UNIVERSITY OF MISSOURI NEWS

Add to Our Faculty: Dr. Eugene T. Standley, formerly Instructor in Pathology, Columbia University College of P. and S., New York, is now Asst. Prof. of Pathology.

We Travel, Talk: The Faculty is continuing postgraduate teaching activities in Missouri and elsewhere. Dr. W. A. Sodeman, Chairman, Medicine, addressed the K. C. Southwest Clinical Society in October, was programmed at the Medical Advancement Trust, Maumee Valley Hospital, Toledo, Ohio, October 12-18, where he gave six medical presentations. Dr. Robert L. Jackson, Chairman, Pediatrics, attended the Study Section meeting, U.S.P.H.S., in Bethesda, Maryland, September 16-19. Dr. Clarence D. Davis, Chairman, Ob. and Gyn., addressed the Nick Carter Travel Club, Hague Maternity Center, Jersey City, N. J., October 15-16. On October 1, Dr. Robert L. Jackson, Chairman, Pediatrics, lectured on growth and development at the LaSalle Hotel, Chicago, and attended the American Academy of Pediatrics. Dr. Walter R. Hepner, Jr., Assoc. Prof. Pediatrics, also attended the American Academy of Pediatrics. Dr. Victor J. Cabelli, Asst. Prof. of Microbiology, represented the U. of Mo. at the annual meeting of the A.P.H.A. in Buffalo, N. Y., October 11-15. Miss Dorothy L. Vorhies, Asst. Prof. of Dietetics, and Director, Dietary Department, discussed food service problems of the small rural hospitals in Missouri, Missouri Hospital Association, Springfield, Missouri, Thursday, October 14. On September 21, Dean Roscoe L. Pullen addressed the Lincoln-St. Charles Counties Medical Society at Wentzville, Missouri, on "Progress of the University of Missouri School of Medicine." On September 24, Dean Pullen addressed the St. Louis A. of G. P., St. Louis, on the subject, "Trends Influencing Medical Practice and Medical Education." On October 4 and 5, Dean Pullen represented the U. of Mo. at the Centennial Celebration at Emory University School of Medicine, Atlanta, Georgia; he participated in commemoration ceremonies. On October 14, Dean Pullen addressed the Moberly Rotary Club on the subject, "Progress of the Univ. of Mo. School of Medicine." On October 17, Dean Pullen participated in a panel discussion on graduate medical education before the Association of A. Med. Colleges annual meeting in French Lick Springs, French Lick, Indiana. Dr. Joseph E. Flynn, Chairman, Pathology, represented the U. of Mo. at the Second Teaching Institute, The Association of American Medical Colleges, French Lick Springs Hotel, the week of October 10. This Institute is devoted to the teaching of pathology, microbiology, immunology and genetics. Dr. Flynn also attended the Annual Conference of Cancer Coordinators for medical schools throughout the United States, called by the U.S.P.H. Service, in French Lick Springs, October 15-16. Dr. Flynn and Dean Pullen remained for the annual meeting of the Association of American Medical Colleges.

Lecture: Dr. Julius Lane Wilson, Professor of Medicine, U. of Penn. and Director of Medical Education, American Trudeau Society, addressed the faculty and student body on "The Future of Tuberculosis," October 7.

Grants: Dr. Lloyd E. Thomas, Assoc. Prof. of Biochemistry, has received $11,000 for studies on nucleoproteins from the U.S.P.H. Service, a renewal of last year's grant. The total of grants and gifts to the U. School of Medicine during the current academic year approximates $74,000.

Society Members: Dr. Clarence D. Davis, Chairman, Ob. and Gyn., was recently elected to K. C. Society of Ob. and Gyn. Miss Dorothy L. Vorhies, Asst. Prof. of Dietetics, recently elected to the Quota Club of Columbia, addressed them October 12, concerning her Department at the U. of Mo.

WASHINGTON UNIVERSITY NEWS

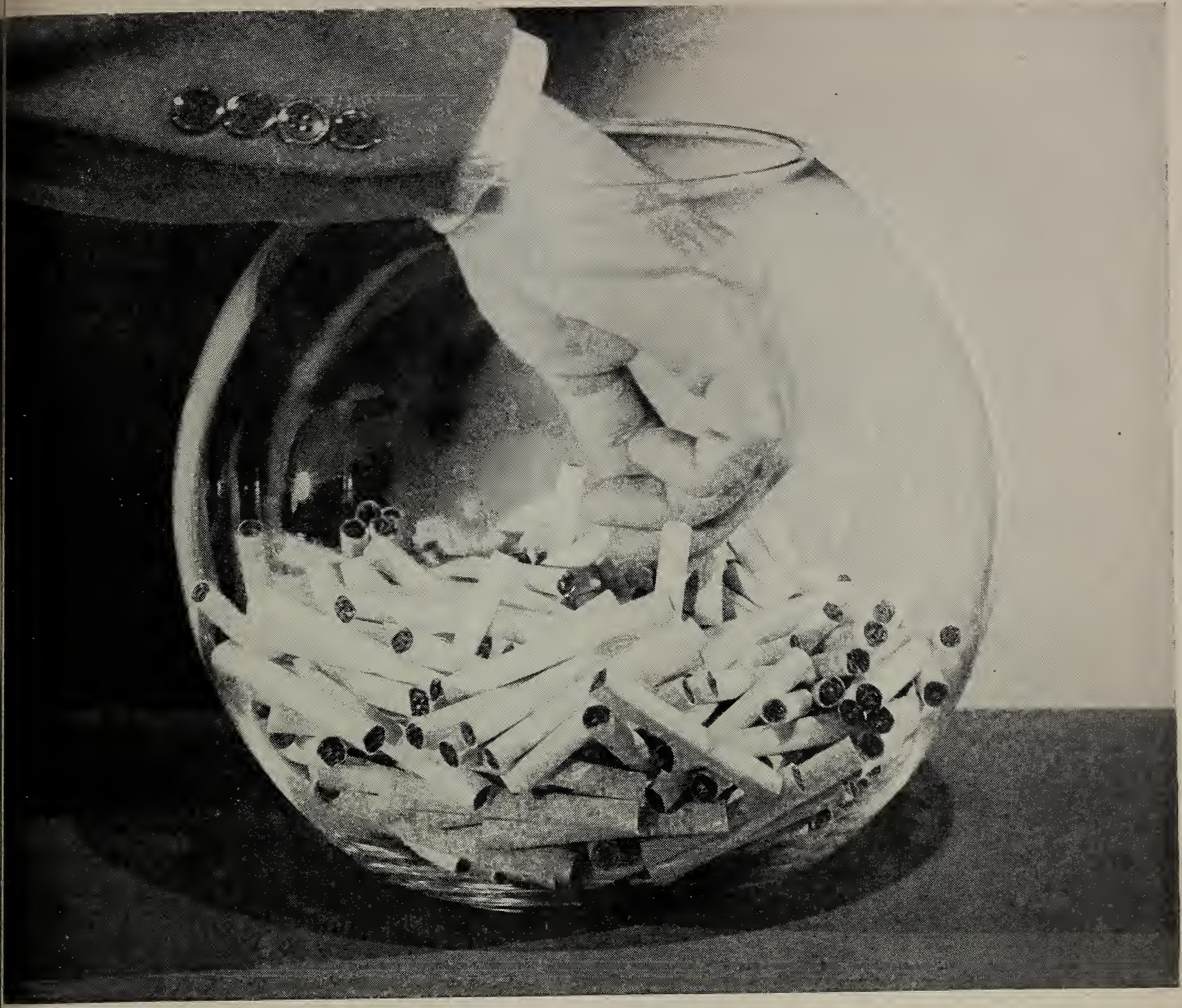
From the Old to New: The new $723,480 Barnard Free Skin and Cancer Hospital, Washington University-Barnes Hospital Medical Center, was dedicated October 13, at the David P. Wohl, Jr., Memorial Hospital Auditorium.

The new building has five floors with 42 beds. The fifth floor houses a tumor clinic which recently received gifts totaling $130,000 for construction and equipment. Of this, $50,000 was from the Donald L. Barnes Foundation and Mr. Barnes personally, for equipment, approximately $60,000 was from an anonymous donor and about $15,000 was from reserve funds of the department of radiology. The fifth floor project was initiated by a $10,000 pledge by Dr. Wendell G. Scott, Assoc. Prof. Radiology and associates, and by their patients interested in cancer and malignant tumor research.

A 24-million volt betatron, purchased and operated by the Mallinckrodt Institute of Radiology, is on the ground floor. The Institute also will provide radiologic services. Research laboratory space is on the second floor, and patients will be on the third and fourth floors. Barnes Hospital will provide operating rooms, laboratory tests, anesthetics, nursing, food service, laundry, pharmacy and house staff. The Barnard Hospital was established at 410 North Jefferson, in 1905, as the St. Louis Skin and Cancer Hospital. In 1910, it was moved to 3427 Washington Ave., through a gift of $135,597 from George D. Barnard, and at that time the Hospital's name was changed.

Another Honor: Dr. Evarts A. Graham, emeritus Bixby Prof. of surgery, received an honorary Doctor of Science degree from Emory University School of Medicine, October 5, during the two day centennial celebration. Dr. Graham presented an address, "Remarks on the Development of Chest Surgery."

We Lecture, Travel: The Washington University



Which filter-tip cigarette is the most effective?

In continuing and repeated impartial scientific tests, smoke from the new KENT consistently proves to have much less nicotine and tar than smoke from any other filter cigarette—old or new.

The reason is KENT's exclusive Micronite Filter.

This new filter is made of a filtering material so efficient it has been used to purify the air in atomic energy plants of microscopic impurities.

Adapted for use as a cigarette filter, it removes nicotine and tar particles as small as 2/10 of a micron.

And yet KENT's Micronite Filter, which removes a greater percentage of nicotine and tar than any other filter cigarette, lets through the full flavor of KENT's fine tobaccos.

Because so much evidence indicates KENT is the most effective filter-tip cigarette, shouldn't it be the choice of those who want the minimum of nicotine and tar in their cigarette smoke?

Kent with the exclusive Micronite Filter

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TWENTY
KENT
CIGARETTES
WITH THE MICRONITE FILTER

Medical Society recently heard three papers on research by Dr. Arthur L. Haskins, Asst. Prof. Ob. and Gyn.; Dr. Edwin H. Schmidt, Asst. in Neuropsychiatry, Dr. Patricia O'Neal, Inst. in Psychiatry, and Dr. Eli Robins, Asst. Prof. of Psychiatry; and Dr. Sol Sherry, Director, Medical Services, the Jewish Hospital, and Assoc. Prof. of Medicine. Dr. Robert L. Lam, Asst. Prof. of Neuropsychiatry, participated at the University of Illinois Division of Services for Crippled Children Conference on September 20, dealing with "Problems of the Child with Brain Injury."

Research Grant: $19,000 recently was granted Dr. Samuel C. Bukantz, Assoc. Prof., Medicine, by U.S.P.H.S., for three years' research on "Basic Investigation of the Chemical Nature of the Bronchial Mucus in Asthma." He will be assisted, in the Division of Immunology, by Mrs. Aline W. Schiele and Miss Mary C. Johnson.

New V.A. Set-Up Chief: Dr. Wendell G. Scott, Assoc. Prof. Radiology, has been appointed National Chairman of the Special Medical Advisory Group of the V.A.

Research Award: Wolff Kirsch, fourth-year medical student, was singled from 29 research students to work with Dr. R. G. Macfarlane, at Radcliffe Infirmary, Oxford, England, until January 31, 1955. He then will return to complete his medical studies. Leaving for Oxford in September, he will work on "Easy Bruising, the Fate of Extravasated Blood Pigments," under a Jackson Johnson Scholarship.

Recent Lectures: By Sir Russell Brock, Lecturer in Thoracic Surgery, Guy's Hospital Medical School, and Surgeon, Brompton Hospital for Chest Diseases, London, England; and Dr. C. P. Stewart, Chief of Clinical Biochemistry, Royal Infirmary, University of Edinburgh, Scotland.

ST. LOUIS UNIVERSITY NEWS

Honored: Dr. Edward A. Doisy, director of the department of biochemistry, Saint Louis University School of Medicine, was honored at the Silver Anniversary dinner of the Central Association of Obstetricians and Gynecologists held in St. Louis October 8.

The convention, which was held at the Jefferson Hotel October 7-9, was attended by some 500 representatives from twenty-eight states as well as local physicians, who are not members of the Central Association.

Dr. Doisy was presented an inscribed gold clock, commemorating his discovery of the first known female hormone, estrogen, twenty-five years ago. Dr. Elwood Sharp, clinical director of Parke, Davis Company, Detroit, made the presentation.

Dr. Paul Fletcher, part-time senior instructor in gynecology and obstetrics at the university, was elected vice president of the Central Association. The Central Association of Obstetricians and Gynecologists was founded in St. Louis twenty-five years ago.

Elected: Philip A. Conrath, Associate Professor and Director of the Section of Medical Illustration, St. Louis University School of Medicine, was elected president of the Association of Medical Illustrators at the 9th annual meeting of the association which met at Vanderbilt University, Nashville, Tennessee, October 2-6.

The association of Medical Illustrators 10th annual meeting, over which Prof. Conrath will preside, will be held in New York next year.

Lecture: Dr. Harold Jeghers, Director Department Medicine, Georgetown University Medical Center, Washington, D.C., will deliver the 6th annual William H. Vogt Lecture, sponsored by the Alpha Mu Chapter, Alpha Kappa Kappa Fraternity of Saint Louis University School of Medicine, on Monday, November 8.

Dr. Jeghers will speak on "Developing a Personal Medical Library."

The lecturership was established in 1950 to honor the memory of the late Dr. William H. Vogt, a member of the fraternity, and professor and director of the department of obstetrics and gynecology. Dr. Vogt served on the staff of Saint Louis University School of Medicine from 1919 until his death on June 17, 1945.

Of This and That

Mark M. Marks, M.D.

During my lesser years, a disgruntled citizen of the realm would "throw in the sponge," with—"Ought to give it back to the Indians." Now, he vents his spleen in an outburst of finality consisting of, "That's for the birds." I suppose that's progress.

I found my two sons enraptured by the wail, thump and screech of what sounded like woodwinds, tympani and brass in agony, coming from their platter player. No little bemused I asked what it represented. Happily, these music lovers told me, with some superiority, that it was "progressive jazz." "What does it have beside noise?" I foolishly asked. By this time my ignorance was showing. The eldest one patiently explained it had "beat." "So does a drum," I commented on parting. Both wearily shook their heads, the younger one made motions with his hands to indicate a geometric plane of four equal sides.

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In a matter of moments, her nerves will be calmed. Her anxiety will be alleviated. And her tensions will slide into somnolence.

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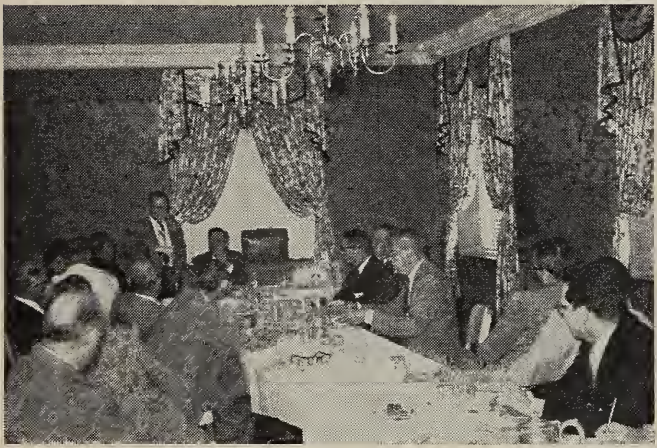
THE COUNCIL

The Council met at the Kentwood Arms Hotel, Springfield, September 25, 26, 1954, with W. S. Sewell, M.D., Springfield, Chairman, presiding. Present were Drs. Sewell; Donald M. Dowell, Chillicothe; W. F. Francka, Hannibal; R. O. Muether, St. Louis; Otto W. Koch, Clayton; J. Loren Washburn, Versailles; G. C. Stauffacher, Sedalia; Richard H. Kiene, Kansas City; J. H. Summers, Lebanon; Ben M. Bull, Ironton; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; E. Royse Bohrer, Jefferson City; Carl F. Vohs, St. Louis; A. S. Bristow, Princeton; James R. Amos, Jefferson City; Henry Allen, St. Louis; Durward G. Hall, Springfield; Messrs. Jasper Smith, Springfield; John Buckner, Springfield; Ed Schneider, James Koenig, Lemoine Skinner, Ray McIntyre, T. R. O'Brien, St. Louis; John A. Hailey, Jefferson City. Drs. F. L. Feierabend, Kansas City and A. E. Spelman, Smithville, attended the Sunday session. Mrs. W. E. Martin, Odessa, attended the Saturday session.

WOMAN'S AUXILIARY

Mrs. Martin called attention to the Woman's Auxiliary being one of the most restrictive women's organizations. She thanked the Council and the headquarters office for assistance given the Auxiliary. She reported that they had eight student loan funds out, totalling $6,000. She reviewed some of the work of the Auxiliary.



ADVISORS TO PRACTICAL NURSES

A letter was presented from the Licensed Practical Nurses' Association asking for advisors in St. Joseph, Farmington, Cape Girardeau and Sedalia. It was suggested that Councilors from these districts make appointments.

PHYSIOTHERAPY ADVISOR

A request to Mr. O'Brien to serve on an advisory committee for the eastern division of the Physiotherapy Society was presented. After discussion, on motion of Dr. Muether, it was voted that Mr. O'Brien be instructed to write that the Council of the Association suggested that he not accept the advisory position but that the chairman or a member of the Committee on Physical Medicine be appointed in this capacity, and that if this is not satisfactory to the group, they again contact Mr. O'Brien.

STUDENT LOAN FUND

Dr. Petersen said that he had been asked to name two members as advisors on the Woman's Auxiliary Student Loan Fund and that he had named J. W. Allee, M.D., Columbia, and J. W. Thompson, M.D., St. Louis.

INVITATION TO A.M.A.

A request from the Convention Bureau to invite the A.M.A. to hold its 1958 Interim Session in St. Louis was presented and on motion of Dr. Dowell, it was voted to extend this invitation.

TREASURER'S REPORT

Dr. Vohs gave the Treasurer's report and said that the Association was functioning within its budget.

BUDGET COMMITTEE

Dr. Sewell appointed the following Budget Committe: Drs. Vohs, Chairman; Bohrer, Francka, Buhler, Sewell.

CARE OF THE PATIENT

A progress report of the Joint Conference for the Improvement of the Care of the Patient was accepted by the Council.

FEDERAL LEGISLATION

Final action of the Congress on some legislation influencing physicians was reviewed. Attention was called to the final exclusion from Social Security of physicians, dentists, osteopaths, lawyers and some other groups. It was pointed out that the waiver of premium clause in permanent and total disability was adopted though opposed by the medical profession. On the President's reinsurance bill, it was pointed out that the A.M.A. opposed this as being unnecessary in view of the many private insurance firms in the reinsurance field. The President stated recently in Denver that the reinsurance bill will be introduced again next year. The Hill-Burton plan was continued and about $1,850,000 would be available to Missouri; Missouri will also share in a fund for chronic hospital, rehabilitation centers, diagnostic centers and nursing centers, this measure being restrictive to such use.

HOSPITAL LICENSING LAW

Dr. Petersen said that there had been two meetings to study the implementation of the hospital licensing law passed by the 1953 Legislature and that work was still in progress on this.

New...

"Uses of Wine in Medical Practice (a Summary)"

—published by the Wine Advisory Board, California

Praised through the ages for its tonic effect, wine—the classic beverage of moderation—has been the object of intensive physiologic and pharmacologic study during the past 15 years.

Much of this research, which is still in progress, has been instituted in various centers by the Wine Advisory Board of California in an effort to separate fact from folklore and so evaluate the true place of wine in medical practice.

Aside from the psychobiologic effects of wine, a phase of research very difficult of objective proof, there is rapidly accumulating a definite literature covering the precise effects of wine on the human host.

A cross-section of highly interesting research findings have been summarized briefly in this new brochure intended for distribution to the medical profession.

The table of contents includes chapters on—

"Chemical Constituents of Wine"
"Wine in Gastroenterology"
"Wine in Pharmacy"
"Wine and Nutrition"
"Wine in Geriatrics and the Treatment of the Convalescent"

It will be noted that many of the important physiological properties of wine differ significantly from those of plain alcohol. For a few cents a day your patients can have the appetite-stimulating, relaxing properties of wines produced from the world's finest grape varieties grown in an ideal climate and processed with modern wine-making skill.

We believe you will find "Uses of Wine in Medical Practice" a valuable addition to your files. A copy is available to you, at no expense, by writing to:

Wine Advisory Board, 717 Market Street, San Francisco 3, California.

RESIGNATION OF EDITOR

The Chairman announced that Dr. Williams had resigned as Editor, effective December 31, 1954. He appointed the following committee to study appointment of a new editor: Drs. Francka, Petersen, Muether, with Dr. Sewell ex-officio. He asked the committee to meet on adjournment of the Council.

A.M.A. SESSION

Mr. O'Brien gave a brief summary of the A.M.A. Annual Session, pointing out that the main discussions were on fee splitting, osteopathy, care of veterans, foreign medical school graduates, closed panel plans, joint accreditation.

LEGISLATIVE ACT ON LICENSURE

Mr. Smith presented a tentative draft of a proposed bill for the purpose of establishing one licensing board of the healing arts. The bill was gone over section by section and some changes were made. It was stated that the Council would receive revised copies and that the bill would be studied also by the Committee on Public Relations.

DIVISION OF HEALTH

Dr. Amos reviewed some of the work of the Division of Health, calling special attention to the changes to be made in vital statistic reporting, a new Bureau of Hospitals, Hill-Burton funds, civil defense, hotel licensing, stream pollution, narcotic law, and said that the committee on Laboratory Medicine and Infant and Child Health had been most helpful to him. He asked that the Committee on Conservation of Eyesight study the trachoma situation. This was done on motion of Dr. Buhler, with the suggestion that Dr. Amos meet with the committee.

SELECTIVE SERVICE ADVISORY COMMITTEE

Dr. Allen reviewed the establishment and work of the Advisory Committee. He said that after July 1955 doctors will come under the regular draft. He said that 1,250 doctors will be needed by the armed services between January and July of next year. He said that there were still in Missouri 15 to 20 men who had received their education under government subsidy, are in priority 1 and 2, and who have been deferred and that he believed that now all priority 1 and 2 men should be made available. On motion of Dr. Buhler, this was approved.

REPORT OF COMMITTEE ON EDITOR

Dr. Francka reported for the committee appointed to study the editorship: 1. The Executive Secretary be instructed to write Dr. Williams accepting his resignation and thanking him for his services. 2. That the appointed committee be in charge of the publication for the time being. 3. That the Council empower the committee to appoint an editor after further study. On motion of Dr. Vohs, the report was accepted.

REPORT OF FIELD SECRETARY

Mr. McIntyre said that the Association exhibit at the state fair on "Your Heart" had been successful, that the attendance at the fair was 500,000. He reviewed meetings that had been held since the first of September, all showing good attendance. He called attention to a Southeast Missouri Cancer Conference to be held in Cape Girardeau on September 30; the Kansas City Southwest Clinical Society Conference October 4 to 7; meeting of the Medical Secretary and Assistants in Jefferson City on October 10, at which Dr. Petersen will speak; Missouri Health Council meeting in Columbia October 11; Missouri Academy of General Practice in Jefferson City October 27 and 28; Clay County celebration of its 100th anniversary on November 4; the Southern Medical Association meeting in St. Louis November 8 to 11. He said that 37 physicians had located in towns of less than 10,000 since the first of the year. He reviewed the hospitals or additions recently completed and plans for future construction of hospitals. He told of a conference held by representatives of the Committee on Infant and Child Health with representatives of organizations interested in the health of the school child. He said that the conference agreed upon the following: 1. Certain School Health Policies as suggested by the National Committee on School Health Policies. 2. To seek opportunity to appear before the Missouri Association of school administrators to discuss the services that member organizations of the Conference have to offer schools in relation to these policies.

RESOLUTIONS ON BLUE CROSS

Resolutions from the Buchanan and Grand River Medical Societies opposing Blue Cross paying osteopathic hospitals were presented. This was discussed by most of the Council, it being brought out that the Council could not control this, that it was also a national problem and an economic one as Blue Cross was in a competitive field with commercial insurance companies. It was decided that the only power the Council had in the situation was to refer the resolutions to the boards of Blue Cross and Blue Shield.

PATHOLOGY AS PRACTICE OF MEDICINE

Dr. Buhler presented a letter written to Dr. Allen concerning the Iowa Hospital Association contending that all of pathology is not the practice of medicine, that it is in two divisions, professional and technical service. The letter suggested that the Board of Trustees of the A.M.A. would welcome opinions on this and on motion of Dr. Buhler it was voted that a letter in response to the situation in Iowa go to Dr. Lull, opposing the division of the practice of pathology into two divisions.

AMERICAN COLLEGE OF PATHOLOGY FILM

Dr. Buhler asked approval of a film on careers in pathologic work for girls which the American College of Pathology has developed and said that several had seen and approved the film. On motion of Dr. Dowell, the film was approved.

CONFIDENCE VOTE TO B.C. AND B.S.

On motion of Dr. Bull, it was voted that the Council give a vote of confidence to the Boards of Trustees of the Blue Cross and Blue Shield on handling their present problems to their best discretion.

BLUE CROSS AND BLUE SHIELD

Dr. Feierabend reviewed some of the problems facing the prepayment plans at present, pointing out that they are in an untenable position with the public in some respects, that they are limited in their competition with commercial companies. Following discussion, it was stated that any changes in plans should be made known to the Council prior to the change and that any change would be made in both the state and Kansas City plans at the same time.

RURAL HEALTH

Dr. Spelman reviewed the work of the Committee on Rural Health, pointing out its assistance in publicity of a course in industrial medicine at Kansas University on December 6, 7 and 8; the recognition that a committee may be needed for accumulating information on insurance; further publicizing rural practice to interns; the need of a member on the state committee on brucellosis; that future changes in prepayment plans should be in the hands of the boards of Blue Cross and Blue Shield; the readiness of the committee to assist the University of Missouri in education for rural practice; the present status of the survey of indigent care and the need of the survey committee of $3,000 to complete its work. On motion of Dr. Vohs, the report was accepted and the request for funds was referred to the Budget Committee.

CONTRACT PRACTICE

Mr. O'Brien said that a brief on contract practice would be presented at the next meeting of the Council.

MEDICAL SECRETARIES

A letter asking approval of the Missouri Society of Medical Secretaries and Assistants was presented. On motion of Dr. Buhler, it was voted that the con-

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Johnnie Walker Black Label
Blended Scotch Whisky
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Johnnie Walker stands out in its devotion to quality. Every drop is made in Scotland. Every drop is distilled with the skill and care that come from generations of fine whisky-making. And every drop of Johnnie Walker is guarded all the way to give you *perfect* Scotch whisky... the same high quality the world over.

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STILL GOING STRONG

JOHNNIE WALKER
BLENDED SCOTCH WHISKY

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stitution of the organization be studied by the Committee on Public Relations.

LEGISLATION

It was suggested that each Councilor consider the handling of the proposed bill to be introduced in the Legislature and write his ideas to the Executive Secretary.

Musings of Field Secretary

(Continued from page 1021)

medical and hospital care and to health matters in general. He stressed the importance of doctors' secretaries and assistants being informed as to the position the profession takes on health issues and why.

One hundred four physicians registered at the two day annual meeting of the M.A.G.P. held at the Governor Hotel, Jefferson City, October 27 and 28. Ten hours of formal P.G. credit toward academy membership requirements are given for attendance at all the sessions. The annual banquet on Wednesday night was attended by 146 persons including doctors, wives and guests. Mr. John Thornberry, Kansas City, newscaster and commentator for WHB and WHB-TV was the guest speaker. His talk was centered on "Friendship." Dr. Joseph Getelson, Kansas City, took over as president at the close of the banquet. Other officers elected during the session were: Dr. T. L. Dwyer, Mexico, president-elect; Dr. George Wood, Carthage, vice president, and Dr. P. V. Siegel, Smithton, secretary-treasurer. Chosen directors for three year terms were Dr. C. E. Martin, St. Louis; Dr. R. F. Ferguson, Webb City, and Dr. Cecil Leitch, Kansas City. Dr. Kenneth Glover, Mount Vernon, and Dr. C. E. Martin, St. Louis, were elected delegates to the American Academy of G.P. with Dr. Jesse Rising, Kansas City, and Dr. C. G. Stauffacher, Sedalia, alternates. The Academy's annual meeting for 1955 will again be held in Jefferson City on October 26 and 27.

Fraternally Yours

(Continued from page 1020)

ment. But inexorable changes will come in time, despite grumbling, even vehement, obstructionism.

This writer predicted, years ago, that such a move would be beneficial to everyone, especially the public. Such a published espousal then caused some of our dearest friends to moan and groan, and we were castigated for this proposal which seemed ahead of the times. Well, we stick by our guns! Some day, in some way, the things we predicted several years ago will come to pass. As with nonsegregation, if we can but still our bias and but quiet our fears and hatreds (children of non-thinking prejudice), if we can but sleep, figuratively, for the next ten years, we will find most of these mountainous fears and phobias have dissipated. These changes are bound to come, some of these days.

V. T. W.

POSTGRADUATE COURSES

RADIOLOGY AND RADIOACTIVE ISOTOPES
February 14, 15, 16 & 17, 1955

Guest Instructors:

LAUREN V. ACKERMAN, M.D., Washington University.
WILLIAM H. BEIERWALTES, M.D., University of Michigan.
CARL C. BIRKELO, M.D., Wayne University.
JAMES W. J. CARPENDER, M.D., University of Chicago.
CARL L. GILLIES, M.D., State University of Iowa.
PHILIP J. HODES, M.D., University of Pennsylvania.
JOHN F. HOLT, M.D., University of Michigan.
B. V. A. LOW-BEER, M.D., University of California.
JAMES STOBER, Physicist, Kelley-Koett X-Ray Corp.

* * * * *

METABOLISM AND ENDOCRINOLOGY
February 24, 25 & 26, 1955

Guest Instructors:

E. PERRY McCULLAGH, M.D., The Cleveland Clinic.
HENRY T. RICKETTS, M.D., University of Chicago.
EDWARD J. RYAN, M.D., Emporia, Kans.

Faculty also includes Fifteen Members of the University Staff.

Program emphasizes Ward Rounds and Panel Discussions in addition to the Didactic Lectures.

* * * * *

For program announcement and information, write:

Extension Program in Medicine
UNIVERSITY OF KANSAS SCHOOL OF MEDICINE
Kansas City 12, Kansas

Councilor District News

Clay County Medical Society Centennial

The second oldest Medical Society, west of the Mississippi River, celebrated the culmination of 100 years of activity and progress at its Annual Clinical Conference at Excelsior Springs, Thursday, November 4. This centennial observance brought forth the fragrance of medical science and at the same time put the spotlight of discussion on some of the thorns of medical economics.

One of the highlights of the entire session was a panel discussion "Our Government—Our Profession" with Roscoe Pullen, M.D., Dean of the School of Medicine, University of Missouri, as moderator, and Paul R. Hawley, M.D., Director, American College of Surgeons, Chicago, Ill.; John Fowler, M.D., Barre, Mass., President-elect, American Academy of General Practice; W. Palmer Dearing, M.D., Deputy Surgeon General, Department of Health, Education and Welfare, Public Health Service, Washington, D. C., and Thomas H. Alphin, M.D., Assistant Director, Washington Office, American Medical Association, participants. Dr. Hawley in his panel comments predicted expanding development of insurance for catastrophic and chronic illnesses. He stated that such insurance will be developed on a deductible basis. The sickness care of the indigent needs to be assumed much more as a local community responsibility, he asserted. Dr. Fowler expressed his opposition to the government helping to finance medical education and medical schools. Dr. Dearing discussed how the government is aiding in scientific research and currently that pertaining to chronic illnesses. He stated that health is everybody's business and the people themselves will ultimately decide how much the government will spend on overall health care. Dr. Alphin suggested that more doctors actively participate in community affairs including those having to do with the economic aspects of medical care.

In his formal talk on "Ethics Within the Profession," Dr. Hawley asserted that unjustified surgery is the most serious evil in medical practice today. He pointed out that there is a difference between unnecessary and unjustified surgery. The most competent and conscientious surgeon may once in a while make an honest mistake in performing an operation which he finds to have been unnecessary.

The guest of honor at the Centennial celebration banquet was Dr. Ralph Major, grandson of one of the original founders of the Society. Dr. Major is Professor Emeritus, Department of Medicine, University of Kansas Medical School. Dr. W. A. Sodeman, Professor and Chairman, Department of Medicine, University of Missouri School of Medicine, gave the toast of the evening.

"Our Heritage Is Our Responsibility" was the subject of the featured address of the evening given by Thomas H. Alphin, M.D., of the Washington Office, American Medical Association, and published on page 1011 of this issue of MISSOURI MEDICINE.

In addition to the Clinical Conference program, the Woman's Auxiliary to the Clay County Society held a special program and entertained visiting doctor's wives.

One hundred and six doctors attended this gala celebration while forty-two ladies registered for the

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Hypertension?
Emergencies in Operations?
Myocardial Infarction?
And many other questions.

Round table discussions, formal presentations and color television will answer these and many other problems of medical and surgical practice at the

97th Annual Session

Missouri State Medical Association

Municipal Auditorium, Kansas City
March 27, 28, 29, 30, 1955

women's special program. Officers of the Missouri State Medical Association who attended were: H. E. Petersen, M.D., St. Joseph, President; W. S. Sewell, M.D., Springfield, Chairman of the Council; Donald M. Dowell, M.D., Chillicothe, Councilor, First District; A. S. Bristow, M.D., Princeton, Delegate to American Medical Association, and V. T. Williams, M.D., Kansas City, Editor, Missouri Medicine. Mr. T. R. O'Brien, St. Louis, Executive Secretary, Missouri State Medical Association; Mr. Ray McIntyre, St. Louis, Field Secretary, Missouri State Medical Association; Mr. John Buckner, Springfield, Executive Secretary, Greene County Medical Society, and Mr. William H. Bartleson, Kansas City, Executive Secretary, Jackson County Medical Society, were also in attendance.

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Clay County Medical Society

The September meeting of the Clay County Medical Society was held at the Colonial Hotel, Liberty, Tuesday evening, September 28, beginning with a dinner, being served to members of the Society and the Auxiliary at 6:30 p.m.

The evening program, as arranged by **E. C. Robichaux**, M. D., and **David Musgrave**, M.D., of Excelsior Springs, presented **Herbert J. Rinkel**, M.D., Kansas City, who discussed "Etiology and Therapeutic Problems of Hayfever."

S. R. McCracken, M.D., *Secretary*

Grand River Medical Society

William W. Gist, M.D., Kansas City, spoke before a dinner meeting of the Grand River Medical Society at Chillicothe on October 14. Dr. Gist discussed "Surgical Management of Varicose Veins and Their Complications." Numerous slides and x-ray pictures were used effectively in the presentation of this subject.

Fifty-four persons including doctors, auxiliary members and guests enjoyed a fine dinner preceding the scientific program. It was decided to hold the November meeting of the Society on the third Thursday because of Armistice Day on the second Thursday. It was announced that the annual election of officers will be held at the November meeting.

E. A. Duffy, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

W. F. FRANCKA, HANNIBAL, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at Moberly, at the Woodland Hospital, Thursday night, October 14. Dentists of the four counties were guests of the Society. Ray McIntyre, Field Secretary of the Missouri State Medical Association, was also present.

M. Jules King, Medical Economist from St. Louis, addressed the combined group on various principles of medical economics. Mr. King, who is a financial consultant to physicians and dentists, pointed out the need of an adequate insurance program but recommended a diversification of various investments. He advised that government bonds should form a part of any saver's program. Mr. King pointed out that a number of years ago a family could live comfortably on the interest of $25,000.00 but went on to show how difficult it is at present for a professional man to earn and save enough on which to retire.

Forty persons including physicians and guests were in attendance to hear this interesting and informative discussion by Mr. King.

W. D. Chute, M.D., *Secretary*

Forty members and guests attended the dinner.

Speaker talks with members and guests.

FOURTH COUNCILOR DISTRICT

OTTO W. KOCH, BRENTWOOD, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society met on Friday night, October 1, at the County Health Center at

Informal discussion ended the meeting.

Hillsboro. Thirteen physicians and guests were in attendance.

Dr. **B. L. Sinner**, of St. Louis, presented the scientific program. He spoke on "Diagnostic Aids in Diseases of the Rectum and Colon."

Mr. Donald Kountz of the Institute of Research of the University of Missouri was present to answer a number of questions concerning doctor reporting on the medical and hospital indigency survey which is being sponsored by the Missouri Health Council. Mr. Ray McIntyre, Field Secretary of the Missouri State Medical Association, also attended.

J. F. Rutledge, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

South Central Counties Medical Society

The South Central Counties Medical Society met at the City View Cafe in Mountain Grove for dinner Wednesday night, October 27, with the following members present: Drs. **R. W. Denney, S. W. Connor,** and **A. C. Ames,** of Mountain Grove; **Garrett Hogg, Jr.,** of Cabool; **M. B. Perkins,** of Willow Springs, and **C. W. Cooper,** of Thayer, and the wives of most of them. Also Drs. **J. L. Johnston** and **M. D. Bonebrake,** of Springfield. After dinner the ladies went home with Mrs. Denney for the evening.

Dr. Bonebrake spoke on "Irregular Menstrual Bleeding" and Dr. Johnston spoke on "Abnormalities in Pregnancy" and showed slides.

The minutes of the last meeting were read, also a letter reporting Dr. **Leslie Randall** of Licking to be totally and permanently disabled and it was voted to put him on the honor roll.

The president then read a letter from our district councilor which mentioned, among other things, the resignation of Dr. **Vincent T. Williams** as editor of Missouri Medicine and it was voted to send him an expression of our appreciation of his work as editor and regret at his resignation.

In view of the postgraduate lectures being held in Springfield on the third Wednesday night of the next few months, it was voted to change our regular meeting date to the fourth Wednesday night of each month.

A. C. Ames, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

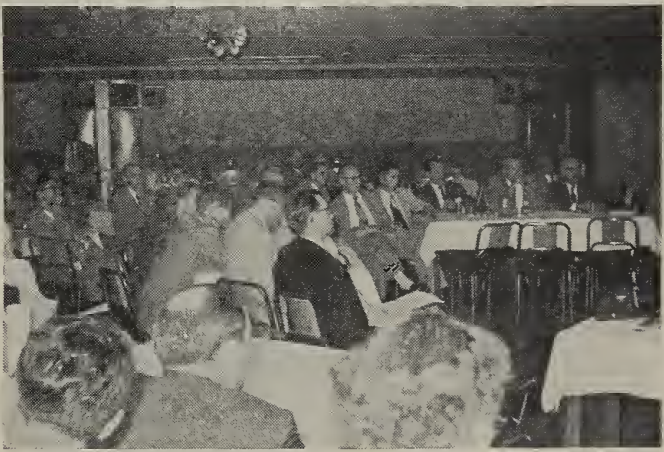
BEN M. BULL, IRONTON, COUNCILOR

Southeast Missouri Cancer Conference

Over one hundred physicians and guests attended the first annual Southeast Missouri Cancer Conference at Cape Girardeau, Thursday afternoon and evening, September 30. A get acquainted luncheon in Memorial Hall on the campus of the Southeast Missouri State College opened the day's festivities. At 1:30 p.m. the afternoon clinical session got under way in the College Library Building. This session featured the following speakers: Irving M. Ariel, M.D., Assistant Professor of Surgery, New York Medical College; **A. N. Arneson,** M.D., Professor, Clinical Obstetrics and Gynecology, Washington University, St. Louis; Oliver H. Beahrs, M.D., Assistant Professor of Surgery, University of Minnesota and the Mayo Clinic; J. A. del Regato, M.D., Director, Penrose Cancer Hospital, Colorado Springs, Colorado, and Associate Professor of Clinical Radiology, University of Colorado; and **Richard E. Johnson,** M.D., Surgical Pathologist and Director of Laboratories, Ellis Fischel State Cancer Hospital, Columbia.

Speakers at the Conference.

Following a social hour and conference dinner in the evening, a round table panel discussion was held with all of the guest speakers participating. The round table was moderated by Dr. **Milton Shoss** of Cape Girardeau, Chairman of the Conference arrangement committee. The evening discussion centered around the presentation of cases by the Southeast Missouri Tumor Clinic.



A round table discussion followed dinner.

This Conference was sponsored by the Cape Girardeau County Medical Society in cooperation with the Missouri Division of the American Cancer Society, the Missouri State Medical Association and the Missouri Academy of General Practice. The Woman's Auxiliary of the Cape Girardeau County Medical Society provided entertainment for the wives of visiting doctors attending the session.

The many reports being received concerning this first Southeast Missouri Cancer Conference endeavor have been so complimentary that careful consideration is already being given to a similar Conference again next year.

Hugh V. Ashley, Jr., M.D., *Secretary,*
Cape Girardeau County Medical Society

Letter to Missouri Medicine

Stillborn and Neonatal Deaths

To the Editor:

Although I have written a letter on this subject it seems worth the effort to examine more recent statistics. Are we making any progress in general practice to lessen the calamity of fetal wastage? Apparently we are not.

When the mother dies during parturition, or soon afterward, the baby dies also in fully one half of the cases. A low maternal mortality invariably decreases the fetal loss. The maternal death rate has declined enormously in recent years. This fact is so picturesquely demonstrated by the figures of Donnelly. (Fetal Loss in Relation to Maternal Mortality, S.M.J. May 1954). In fifteen years the maternal deaths dropped from 5 to less than 1 per thousand births. Nowadays any assemblage of mothers under the care of a doctor or hospital which incurs a maternal mortality of more than one per thousand is condemned as inefficient.

The doctor does save the mother but the baby's first journey is still dangerous. Were we not taught sixty years ago that the fetal passage through the parturient canal was nature's test of fitness to live?

In another article (Bull. St. Louis Medical Society) I suggested that the combined fetal and neonatal death rate should not be more than 30 and the stillbirths and neonatal deaths should be nearly equal in number. Recently, I received a report from one of the small hospitals in St. Louis where the total deaths (fetal and neonatal) were about 20. The wastage of pregnancy, especially in rural communities, is still distressingly high and does not change. In 1848 the rate of deaths in residents (stillbirths and neonatal) was 42; in 1950 the figures ranked a little lower, 39.

I will restrict my study to the seven counties previously selected: Carter, Crawford, Dent, Oregon, Reynolds, Shannon and Washington.

An analysis of these counties reveals that 184 babies were stillborn (births 5,353), in four years that is a rate of 32. It is a task of obstetricians to find the cause of this large wastage.

Nearly all the counties have an excessive high rate. For example, Oregon County reported (1949-52) a stillbirth rate of 27, and Reynolds and Carter Counties combined 29, and Shannon and Dent combined 25, but Crawford County had to bear 36 dead babies—a rate of 35 per thousand births. Washington County disgraced us. Population is 15,000 and in four years 1,500 live births and 63 stillbirths—a rate of 42! A great shortage of doctors—three physicians to 15,000 inhabitants! Of course, hospitals are within a reasonable distance (70 miles). Then why should the county have such a great wastage of pregnancies? A few osteopaths might help. Chicago, Illinois, is spending thousands of dollars to have a few premature babies weighing less than 1,000 grams, and we are losing about fifty babies annually in two or three counties.

Let us analyze the statistics on neonatal deaths. First, look at the figures presented by Vogt and Ritter (S.M.J. May 1954). It is clear that a modern well conducted hospital does save many babies, even if they are periodically exposed to some contagious diseases. In Dr. Vogt's study the death rate has been steady in the last few years at about 15 per thousand births. That is a good record and should serve as an index of efficiency. No wonder that our young mothers desire to be delivered in a hospital; for in the year 1950 in Missouri 74 thousand infants were born in hospitals and only 11 thousand born in homes. To be born in the hospital is the style and we physicians have to recognize the advantages of a good hospital.

Let us look at the neonatal deaths for four years (1949 to 1952) in the selected counties.

The neonatal death rate of Oregon County for four years was 11; Carter and Reynolds Counties combined, 40; (few doctors) Crawford County, 20; Washington County, 26; Dent County, 20; Shannon County, 19. Really Shannon County would take the prize if a low stillbirth could be registered, and actually its stillbirth rate for the four years was only about 13. How is that? Few doctors! Really all the young folks are immigrating. For the births in Shannon County have increased from 117 in 1948 to 167. Then we cannot put the blame on a reduced population (29 per cent in ten years). Is there a first class hospital nearby, or are the few doctors young and skilful? Probably, the mothers are strong and hardy pioneer women.

JOHN ZAHORSKY, M.D.,
STEELVILLE, MO.

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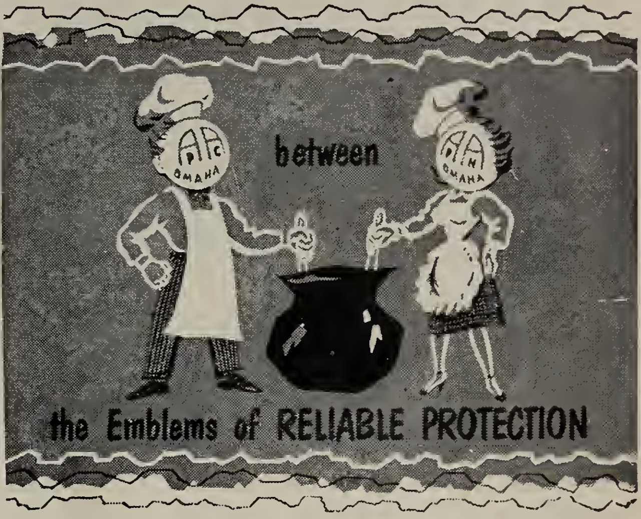
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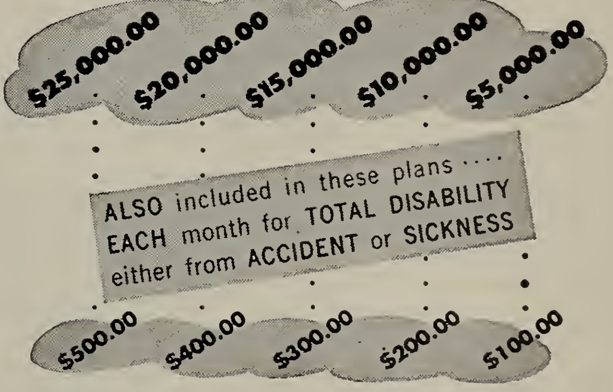
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Music Therapy, Edited by Edward Podolsky, M.D., Department of Psychiatry, Kings County Hospital, Brooklyn, N. Y. Philosophical Library, New York, 1954. Price $6.00.

The effect of music undoubtably varies with the individual, as illustrated by an anecdote the late Dr. W. T. Coughlin used to like to tell. Hoping to divert the patient during a long intracranial operation under local anesthesia he had a phonograph continuously playing soft music. After an hour or so a voice came from deep under the sheets saying, "Will somebody please turn that d— thing off?"

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